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The Pennsylvania School Journal

DEVOTED TO SCHOOL AND HOME EDUCATION

E. E. HIGBEE, EDITOR.

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Butler's Series of Geographies.

The following letter, which speaks for itself, is submitted as testimony from competent authority, and will be read with interest:

Washington, D. C., January 14th, 1889.

E. H. BUTLER & CO., Publishers,
Philadelphia, Pa.

GENTLEMEN:—I beg to acknowledge with thanks the receipt of your communication of the 10th inst., together with a copy of your "Complete Geography (Pennsylvania Edition)" which I have looked over with the greatest interest. Too much cannot be said in praise of this magnificent work, and the fact that such a book is available for the instruction of American youths, no less than for "children of an older growth," is a striking commentary on the wonderful advance of educational facilities in the United States within the last few years. I think few can realize the thoroughness with which you must have ransacked every source of the latest and most reliable geographic information, in order to produce a work so fresh, original and complete. In the United States, for instance, I find you have utilized the latest publications of the Geological Survey, and I can myself recognize the graphic accuracy of your illustrations of Western scenery, unsurpassed in grandeur by anything in the world. Another improvement over other geographies is the representation of the depths of the sea, which you have given with great fidelity, so far as indicated by our latest knowledge. But the most striking and valuable feature of the whole book, to my mind, is the series of relief maps, which put it far ahead of any geography with which I am acquainted. Having seen some of the original models from which these relief maps were produced by photography and photo-engraving processes, and being acquainted with the gentlemen to whose artistic skill and geographic knowledge you owe the beauty and accuracy of these new and wonderfully graphic illustrations, I feel sure that there is no better way to get a correct idea of the broad features of continental structure than by looking at these superb maps. If I may offer a suggestion, it is that you devote a full-page illustration to each of them, and reproduce them by heliotype process, in order to avoid even the slight loss of effect due to the printing from a type-metal plate. The additional expense might not justify you in doing so, although I feel confident that the effect would be so greatly enhanced that it is well worth considering.

My interest in and admiration for the best geography by far that I have ever seen, must be my apology for venturing to criticise any feature of the book, and you have my full permission to print any portion or all of this communication; praise of such a work is like Shakespeare's description of mercy, "it blesseth him that gives and him that takes."

Very truly yours,

EVERETT HAYDEN,

In Charge of Division of Marine Meteorology.

THE
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SCIENCE TEACHING IN THE PUBLIC SCHOOLS.

BY WM. NORTH RICE.

MANY who concede theoretically the desirableness of the study of natural science in the lower schools, maintain that the practical difficulties in the way of its introduction are insuperable. It is objected that we have no competent teachers, no adequate material facilities, and no time in the already crowded curriculum. Science-teaching in the lower schools, it is said, belongs to that far-off millennium

> When the war-drum throbs no longer, and the battle-flags are furled,—

when a constitutional amendment has abolished alcoholic fermentation, and made vice forever impossible, when governments, no longer compelled to support military, naval, and police forces, can spend the bulk of their revenues on education, and when every primary school can have a well-equipped laboratory, museum, and observatory. I believe, however, that the reform is thoroughly practicable. My own official duty, as a member of a college faculty and of a city school board, has required a careful study of all parts of the educational curriculum in a thoroughly practical spirit. And I should regard the general discussion I have given as of little value, unless I could propose definite and practicable measures.

The most serious difficulty in the introduction of natural science into the lower schools is undoubtedly the lack of competent teachers. That the mass of our teachers are incompetent for any very high quality of science-teaching, is a truth as unquestionable as it is melancholy. That much of their teaching will be merely bookish,—that much of it will be so blundering that the scholars will have a good deal to unlearn,—is very certain. This difficulty has been so strongly felt by many scientific men, that they have despaired of any successful science teaching in the schools till a new generation of teachers can be raised up. "Better no teaching at all than poor teaching," is the principle on which they feel themselves reluctantly compelled to advocate the postponement of a reform whose need none can feel more strongly than they. But I believe the worst teaching we are likely to get is better than none. Very poor teaching of science will at least serve to keep before the mind of the child the idea that there is an external world which is worthy of attention and study. Better that many errors should be learned than that the child should grow up without thinking of nature at all. No habitude of mind that is likely to be generated by poor teaching can be so bad as the habitude of stolid indifference which is the natural result of the present system. If we wait for teachers well prepared, before we introduce science-teaching, we shall wait indefinitely. Teachers will prepare themselves after a fashion to teach whatever they are required to teach. No way of making a boy swim has ever been found so effective as putting him into the water.

There are books in abundance (and the

number is constantly increasing), from which a teacher possessed of a fair degree of mental activity can get suggestions which will enable her to do a limited amount of science teaching soundly and well. Paul Bert's "First Steps in Scientific Knowledge" is an admirable guide for teachers of elementary science. Morse's "First Book of Zoology," and Winchell's "Geological Excursions," are books in which acknowledged masters of science have shown how science may be taught to the young. The series of scientific tracts for teachers now being published under the auspices of the Boston Society of Natural History are good, as judged from both the scientific and the pedagogic standpoint. Worthington Hooker's books of science for children, though now somewhat behind the times, are still attractive and helpful books. And the teacher who cannot find something to interest the youngest in Johonnot's series of natural history readers, with their delightful blending of fact and fancy, the science and the poetry of animated nature, is stupid indeed.

The teaching of science in the lower schools can be considerably helped by the teachers in the high schools. In most high schools it is practicable to obtain the services of one or more teachers who have had some genuine scientific training. Arrangements can be made whereby these teachers can now and then give a helpful lecture to the teachers of the lower schools, or give to those teachers the best kind of an object lesson by teaching a lesson in science to the children in their schools.

The summer schools and seaside laboratories afford the means for teachers whose early opportunities for scientific study were scanty, to gain a sound (though necessarily limited) knowledge of scientific facts and methods. The increasing number and the increasing patronage of such institutions is a hopeful sign. They are destined to be of immense service in improving the quality of science-teaching.

The second objection usually urged against the introduction of science-teaching in the lower schools is the lack of material facilities. The force of this objection, however, vanishes, when it is considered that no one proposes for the lower schools complete systematic courses in science. Such courses would indeed demand extensive laboratories and museums. But for somewhat desultory lessons on judiciously selected topics in science, whose aim is primarily to cultivate the powers of observation, and secondarily to afford glimpses of the methods of scientific thought, no extensive material facilities are needed. Many of the most important principles of physics and chemistry can be well illustrated with no apparatus except what can be extemporized. A class of tolerably active boys can collect enough material for biological study as they go along. Many of the most important conceptions of philosophical biology can be illustrated without any specimens which are not everywhere accessible. A boy who has found the elbow, wrist, knee, and ankle, in a cat, a horse, a bat, and a hen, has learned the idea of homology, though he has never compared the arms of a brachiopod with the lophophore of a bryozoan, and never heard of the gastræa theory.

The third objection usually made to scientific study in the schools—the lack of time in the crowded curriculum—hardly deserves an answer. Let the waste of time and mental energy be stopped, which is involved in attempting studies at unnatural times and in unnatural ways, and there will be time enough. Of all economies, the most important is the most neglected—the economy of mental effort. I believe the introduction of science-teaching in the schools will be felt by the pupils as a delightful recreation, rather than as an additional task; and that the improvement of morale will actually enable the schools to accomplish more in other studies.

It remains, then, to outline briefly the work which may be profitably attempted. In the primary schools, and the lower grades of the intermediate, or grammar, schools, the main objects must be to keep alive the child's curiosity in regard to natural objects, to cultivate the power of accurate observation, and to impress the mind with the idea that nature is worth studying. The attempt to teach any systematic body of facts and doctrines, so far as it is made at all, must be strictly subordinated to these more general objects. Hence it is no matter how desultory the lessons may be, if they tend to keep the mind of the child in loving communion with nature. The pupils should be encouraged to collect and bring to school specimens of all sorts of natural objects. So far as time allows, each specimen should be the subject of a lesson. Judicious questioning should bring out all the facts and phenomena which the child has observed or can observe in regard to the specimen. Then the teachers should add something of explanation or information in regard to the object itself or other related objects. And let

questions be suggested now and then, which the child and his elders are alike unable to answer. Thus the child will become early habituated to the complementary truths of the transparency and the unfathomableness of nature. He will learn that he can see into nature a little way for himself, but that beyond his vision stretches a vast unknown. The specimens brought in will be an utterly heterogeneous collection—now a bright-winged butterfly, now a flower, now a plant with insect galls, now a sea-shell brought home from some summer visit to the sea-side, now a lustrous crystal, now a smoothly rounded pebble. All the better. Let the children learn the manifoldness of nature. It will be time enough later for them to survey the fences of systematic definition which man has run through nature's continuous and illimitable fields. Short excursions in the woods and fields (or in the parks, which afford almost the only glimpses of nature to the unfortunate children who are brought up in the great cities), and visits to museums, zoological gardens, and menageries, will be helpful supplements to the work of the school-room.

Besides the utterly desultory lessons already considered, a beginning may be made in the primary schools in somewhat more systematic teaching. The objects most interesting to children are living things—plants and animals. Botany and zoology should accordingly be the principal subjects in the science-teaching in the lower grades. The comparison, drawing, and description of various forms of leaves, will furnish delightful occupation and valuable discipline for the youngest children. A little later the more easy and conspicuous flowers can be studied, and later still the more obscure and difficult flowers. In zoology, attention should be given not to crinoids and hydroids and infusoria, but to the mammals and birds and reptiles and fishes and insects which the children can see alive. In places immediately on the sea-shore, some of the more conspicuous marine animals may advantageously be included. The most common and familiar mammals, as cats, dogs, horses, rats, should be first studied; and rudimentary ideas of homology and teleology and the principles of classification can be developed in the study of these most familiar objects. From mammals the study may proceed in later years to birds, and then to the less familiar lower classes of vertebrates, and later still to arthropods and molluscs. Along with the change of subjects, there will naturally be somewhat of a change of method. There will be less of simple observation and description of external characters, more explanation of anatomy and physiology, and more discussion of general relations.

In several of the States, laws have been passed requiring in all the schools instruction in physiology and hygiene, with special reference to the effects of stimulants and narcotics. It is true that physiology can be taught only in a very unsatisfactory manner to pupils ignorant of chemistry and physics, for physiology is essentially chemistry and physics applied to the complex structures and actions of the living body. But very imperfect knowledge is better than absolute ignorance. And the immense importance of the subject, in connection with the fact that only a very small minority of the pupils will ever reach the high school, more than justifies the attempt to teach some rudiments of physiology in the lower schools.

Somewhat of physical geography will naturally be taught in the higher grades of the primary, and the lower grades of the grammar schools, in connection with the general course in geography. It is very gratifying to observe the change in the school manuals of geography within the last few years, in respect of the greater prominence given to physical geography.

In the higher grades of the grammar schools, it may reasonably be assumed that the reasoning faculties are more fully developed than in the lower grades, and observation and description of forms may rightly give place in large degree to studies in which the relation of cause and effect is emphasized. This will be the most convenient period for the introduction of exceedingly elementary courses in physics and chemistry. The pupils who will never enter the high school ought to get some rudimentary knowledge of these sciences; and a like rudimentary knowledge obtained in the grammar school will be of great advantage to the students in the high school course. Of course, at this stage it will not be desirable or possible to penetrate into the mysteries of polarized light, to enumerate the scores of rare elements, or to discuss the more intricate problems of the chemistry of the compounds of carbon. But it will be possible, in the later years of the course in the grammar school, to learn some of the more important facts and principles in regard to gravitation, the mechanical powers, the simpler and more obvious phenomena of sound, light, heat, and electricity, the distinction between elements and compounds, combustion, the chemistry of air and water,

and the properties of a very few of the most important elements and their compounds.

When the student reaches the high school, he will be possessed of some knowledge of the forms of common animals and plants, the structure and functions of his own body, and the general properties of matter. What is more important than any knowledge of nature which he may possess—he will have kept himself in sympathetic communion with nature; he will recognize nature as a worthy object of study; he will know that he can learn something himself by the observation of nature, but that he has learned only an infinitesimal part of what nature has to teach. His conceptions will be crude, indefinite, inaccurate. His knowledge will require elaboration, systematization, correction. But he will not find the book of nature written in a language whose alphabet he does not know. As he comes to the systematic study of the various sciences, he will not feel that utterly bewildering sense of strangeness with which teachers in our high schools and colleges are now so sadly familiar. In the high school he will come under the instruction of teachers possessed of larger knowledge, and supplied with more extensive material facilities. Now, then, the time has come for *systematic* teaching of science. Random observation and desultory stories of nature must now give place in a large degree to the presentation of systematized bodies of fact and theory.

With the beginning of the high school course comes the separation between those who are preparing for the classical courses in the colleges, and those who are destined to go from the high school directly into practical business life. For the former class the systematic study of science may be mainly deferred until they can enjoy the larger material facilities afforded by the laboratories, museums, and observatories of the colleges. I believe, however, that the complete exclusion of scientific studies from the classical courses in many of our high schools is greatly to be regretted. There are three scientific studies which I would have placed early in the high school course, and required of both the English and the classical students.

First in this list I would name phænogamic botany. There is no study which can conveniently be made to furnish so admirable a discipline in observation. The material is everywhere accessible in abundance. The collection and dissection of the specimens involves no infliction of pain upon sentient creatures. The debris remaining after a lesson is comparatively clean, inodorous, and wholesome. In all these respects phænogamic botany is better adapted for thorough practical study at this stage than any branch of zoology. The structures which are to be examined in the analysis of flowering plants are also of about the right size to afford the most valuable discipline in accurate observation. The work is neither too easy, nor too difficult. It requires the use of the inexpensive simple microscope, but not the use of the costly compound microscope. A thorough training in plant analysis at this period of the educational course will afford mental discipline which can be supplied in no other way.

Secondly, I would require of all students at this stage the study of human physiology. The immense practical importance of this branch of knowledge is a sufficient reason for this recommendation. The outlines of physics and chemistry, which I suppose to have been taken in the later years of the grammar school course, will enable the teaching to be more thoroughly scientific in method than can be the case in the lower schools. And, while the study cannot be made so much of an observational discipline as botany, there is no lack of material for demonstration. Most of the organs of the body present the same general character in other mammals as in man. Hearts, lungs, brains, and eyes can readily be obtained from the butchers, and a superfluous cat can be occasionally sacrificed. And, with the various convenient guides to mammalian dissection which have been published, there is no reason why a high school course in physiology may not be illustrated with a fair amount of demonstration.

Thirdly, a systematic study of physical geography will be invaluable in giving the student an appreciation of the world as a whole—its unity in variety—unity of law amidst endless diversity of phenomena. No study so opens to the student's intelligence the language of nature, teaching him to read the lessons written in the ever-varying landscapes which he may from time to time behold.

It is, in my judgment, greatly to be desired that these studies should be included in the requirements for admission to the colleges. As students naturally desire to enter college as early as possible, there is a strong tendency for the preparatory schools to exclude from their classical courses everything not required for admission to college. The requirement of a small amount of nat-

ural science by the colleges would greatly favor the progress of the reform in the schools.

For the students in the high school who are not in the classical course, there should be in addition systematic studies of physics, chemistry, zoology, geology, and astronomy. For them natural science should certainly be a required study during the whole of the high school course.

While the study of natural science has been advocated on the twofold ground of its practical and its disciplinary value, it has been assumed in this discussion that these two objects are by no means of equal relative importance in the study of different branches of science, or in different periods of the educational course. The study of botany has been advocated especially for its disciplinary value, that of physiology especially for the utility of the knowledge which is acquired. It has been maintained that in the primary school the main objects of the science lessons must be to cultivate a habit of accurate observation and intelligent appreciation of nature, while in the high school each science should be taught as a systematic body of fact and theory. This leads us to notice the unfortunate truth that the two objects of scientific study are to a certain degree incompatible with each other—that the best methods for mental discipline are not the best methods for the acquisition of information. Undoubtedly the method by which the characteristic mental discipline of scientific study can be most effectually secured, is to put the student as nearly as possible in the attitude of the original investigator—to lead him to infer laws and principles from the observations and experiments which he has made himself. But the path taken by the original explorer of a country is often not the most convenient route for subsequent travelers. And a knowledge of laws and principles in science once ascertained can often be taught in ways far more expeditious and convenient than the method of their original discovery. Moreover, many of the most important conclusions rest upon observations only possible in exceptional conditions of time, place, and circumstance. Every student should learn the laws of definite and multiple proportions, which form the foundation of chemical theory; but the ordinary student has no time to perform such a number of experiments in quantitative analysis and synthesis as would make a sound inductive basis for those laws. Every student should learn someting of the phenomena and laws of earthquakes and volcanoes; but it is impossible to get up an earthquake or a volcanic eruption for a laboratory experiment. It is well for every student to learn something of the conclusions in regard to the action of the stomach reached by the classical observations on poor Alexis St. Martin; but it is hardly desirable to repeat St. Martin's accident and injury for the benefit of every class in physiology. The right method of scientific education must be a compromise. The most important facts and principles must be taught by text-books and lectures, in such way as to secure most effectively their being understood and remembered. But, so far as the nature of the subject and the time and means at the disposal of the teacher may allow, mental discipline must be secured by having the student tread for himself the path of observation and experiment, comparison and inference.

This difficulty in science-teaching is somewhat relieved by the consideration that a single fact learned by actual observation or experiment, serves to render real the knowledge of allied facts made known by the second hand process of description, which would otherwise be shadowy and unsubstantial. The student who has made a few quantitative determinations in chemical analysis, understands the meaning of the analysis which he finds in books, The student who has handled the bones of one animal, can read intelligently the description of other skeletons.

In conclusion, I would most emphatically repeat that a plea for the study of natural science is not a plea against other studies. All the studies which have a place in the educational course, have their place by reason of their capacity to afford sound mental discipline and useful knowledge. All true education is broadening and liberalizing in its tendency. Whatever the special studies which natural tastes or professional plans may lead the student to pursue in the later years of his educational course, or whatever the pursuits in which he may engage after leaving school, he will have learned, if rightly taught, an appreciative respect for all the great branches of study in which the human intellect has engaged. He will not despise the study of languages, bringing him into communion with the great minds of other ages and other nations; nor the study of language, interpreting the structure and development of earth's myriad tongues. He will feel the dignity of that pure truth which is embodied in mathematics, and will appreciate the immense utility of the appli-

cations of mathematics in the arts of a material civilization. He will have learned in due time that he has a soul as well as a body; and will appreciate the study of the human mind, as revealed to the direct gaze of consciousness, or as expressing itself in literature and history. And the double world of sensation and consciousness will disclose to him its highest meaning, in the revelation of Him

> Whose dwelling is the light of setting suns,
> And the round ocean, and the living air,
> And the blue sky, and in the mind of man.

But, whatever sources of light may shed their beams upon his advancing intellect, the first star which rose above his horizon will never set. Whatever teachers he may listen to, the one whose gentle voice first roused him from the slumber of unconsciousness will never be forgotten. As his first lessons were from nature's teaching, she will have for his expanding mind lessons continually new. He will

> Find tongues in trees, books in running brooks,
> Sermons in stones, and good in everything.

In July, 1888, the Board of Education of the City of Middletown, Conn., adopted a new Manual for the schools of that city. The new course of study provides for instruction in natural science in all grades from the lowest primary upward, on a plan substantially the same as that which I have recommended. As a sort of practical comment on the views of the address, I append an extract from the Middletown School Manual, giving the instructions to the teachers in the primary and grammar grades in regard to instruction in natural science. The portion of the Manual here quoted was written by myself in connection with the Superintendent, W. B. Ferguson, M. A.

NATURAL SCIENCE.

Introduction.—The object of elementary lessons in Natural Science is twofold—to train the observing powers, and to give information. The former should be especially emphasized in the primary grades, and the two made about equally important in the grammar grades.

The teaching should be chiefly objective. Large, well-defined pictures may be used, whenever it is impossible to obtain the real objects; but it should always be borne in mind that the best pictures are poor substitutes for the objects themselves.

In the lowest grades, the teacher should studiously avoid the use of technical terms, whose meaning is unknown to children. The chief object here is, not to teach science, but to train to close and accurate observation, and to stimulate a keen interest in nature. In no grade should special emphasis be laid upon technical terms and classifications, though somewhat more attention may properly be given to them in the grammar grades. All classifications should, so far as possible, be the result of observation and comparison on the part of the pupils. Let the teacher stimulate, direct and name. Happy the teacher and fortunate the pupils, if in this delightful work, the teacher judiciously combines speech and silence. An occasional talk, however, by the teacher on the subject before the class is both proper and desirable. Such talks should furnish information beyond the reach of the pupils' observation.

Every lesson should be carefully prepared. Aimless and irrelevant conversations are profitless. Allow and encourage the freest expression of what the pupils see. Encourage the pupils to collect and bring in specimens. Elicit by judicious questions, a description of what they have brought. Give them additional information. If necessary, postpone the subject till the next day, and learn something about it.

GRADE I.

Physiology.—Regions of the body—head, trunk, limbs. Details of external parts. Uses of external organs. Hygiene of the skin—bathing.

Zoology.—Lessons on common mammals—*e. g.*, cat, dog, horse, cow, rat, squirrel. Let the pupils observe, compare and describe these animals, as regards their external aspect and habits. Compare these animals with ourselves. Tell stories illustrative of habits of these and other mammals.

Botany.—Lessons on common plants. Teach pupils to distinguish root, stem, leaf. Compare leaves of different plants, as regards general form, margin, venation. Require pupils to draw and describe leaves of many plants.

GRADE II.

Physiology.—The framework of the body. Bones, joints, muscles. Exhibit anatomical diagrams. Teach the pupils to find in their own bodies some of the bones which can be easily felt through the skin. Emphasize the importance of correct attitudes while the framework of the body is rapidly growing and taking shape. Warn against stooping shoulders and crooked backs. The teeth—their forms and uses. Emphasize importance of proper mastication. Necessity of cleaning teeth.

Zoology.—Lessons on mammals continued. Special study and comparison of limbs of mammals. Let the pupils find the elbow, wrist, knee, and ankle, in the cat, dog, horse, cow, rat, squirrel, and any other mammals of which specimens or pictures may be at hand. Thus teach the idea of homology, though the word should not be used. Compare the teeth of common

mammals, and lead pupils to recognize the adaptation of different kinds of teeth to different kinds of food. Teach pupils to recognize degrees of resemblance between animals. The cat and the dog resemble each other more than either resembles the horse or the rat. Develop idea of classification. Lead pupils to recognize characters of carnivores, ungulates, rodents. Most of the mammals with which the children are familiar are included in these three orders. But tell them about monkeys and kangaroos and other very different forms of mammals, that they may not suppose that all mammals are so included.

Botany.—Different kinds of stems—woody and herbaceous, exogenous and endogenous. By study of numerous examples lead pupils to recognize that exogenous stems usually bear net-veined leaves, and endogenous stems usually bear parallel-veined leaves. Distinguish deciduous and evergreen trees. Let the pupils make lists of each.

GRADE III.

Physiology.—Elementary ideas of digestion. Why do we eat? All parts of the body are made of the food which we eat. Food is made into blood, and blood made into all the materials of the body. But our food is mostly solid, and must be made liquid before it can get into the blood. Different substances dissolve in different liquids—*e.g.*, salt in water, camphor gum in alcohol, iron filings in dilute sulphuric acid. Show these experiments. Body itself must make liquids which will dissolve food. Put lump of sugar in mouth. Mouth fills with saliva, and sugar is dissolved. This illustrates secretion of digestive fluids. But meat will not dissolve in saliva. What does become of it? Show anatomical plate of stomach, and tell about gastric juice. Teach (with use of anatomical diagrams) outlines of anatomy of digestive organs. Show by experiment how much more quickly powdered salt dissolves in water than lumps of rock salt. Teach importance of thorough mastication. Show gizzard of turkey, and explain its use. But we have no gizzard; and hence must not swallow our food whole, as the turkey does. Wholesome and unwholesome foods. Alcohol.

Zoology.—Lessons on common birds—*e.g.*, robin, hawk, hen, duck. Let pupils compare these with each other and with mammals. Compare feet and bills of different birds, and show adaptation to habits. Continue lessons on homology of limbs. Let the pupils find elbow, wrist, knee, and ankle, in birds. Is the bat a bird? Talks on instincts of birds shown in periodical migrations and nest-building.

Botany.—Lessons on flowers. Select plants with perfect and somewhat conspicuous flowers. Teach pupils to recognize sepals, petals, stamens, pistils. Let pupils describe and draw the parts in a variety of flowers. Study polypetalous flowers first, afterwards monopetalous flowers. Cut open the ovary in large flowers, and show the ovules. Develop the idea that the parts of a flower are altered leaves.

GRADE IV.

Physiology.—Circulation. When food has been made into blood, blood has to be carried to all parts of the body—function of of circulation. Show by anatomical plates the outline of anatomy of circulatory apparatus. Let pupils find some of their own veins, and feel pulsation of heart and of arteries in wrist and temple. Respiration. Show difference between inspired and expired air by experiment with lime-water. Burn a candle in a jar, and show that the air in the jar affects lime-water like expired air. Carbonic acid always formed when carbon burns—*i.e.*, when carbon unites with oxygen. Carbon in body and in food. Carbon burns—*i.e.*, unites with oxygen,—all over the body. Body runs, like a steam-engine, by burning carbon. Object of respiration—introduction of oxygen, and removal of carbonic acid. Anatomy of respiratory organs. Hygiene of respiration—dress, ventilation. Respiration in aquatic animals. Show gills of fish, and respiratory movements in living fish. Fish breathes air dissolved in water. Show presence of such air by warming a beaker of water, and so forming air-bubbles.

Zoology.—Lessons on common reptiles, amphibia, and fishes—*e. g.*, turtle, snake, frog, perch, pickerel, eel. Let pupils observe, compare, and describe. Continue studies of homology of limbs. How many of these animals have two pairs of limbs like those of mammals and birds? Notice external coverings of these animals. Their bodies are cold. Why? Respiration of fishes. Is the whale a fish? Metamorphosis of amphibia, as shown in changes from tadpole to frog. Teach characters of the three classes—reptiles, amphibia, fishes. Characters possessed in common by mammals, birds, reptiles, amphibia, fishes. Sub-kingdom vertebrata.

Botany.—The pistil of a flower develops into a fruit. Different kinds of fruits.

Seeds. Show the embryo in beans and other large seeds. Plant seeds in pots, and show growth of plants from seeds. Cycle of growth, reproduction, death.

GRADE V.

Physiology.—Nervous system. Analyze the series of actions when a boy puts his hand on the radiator, and finds it too hot. Nervous system a telegraphic system in the body. Brain the central office. Afferent and efferent nerves. Anatomy of the nervous system. Hygiene of the nervous system—stimulants and narcotics.

Zoology.—Study the lobster. Lead pupils to recognize jointed eternal skeleton, distinct regions of body, jointed limbs. Trace similarity of structure in feelers, jaws and accessory jaws, nippers, legs, and other appendages, including the caudal fin. Cut of edge of carapace on one side, and show gills. Contrast articulate type of structure, as shown in lobster, with vertebrate type, as shown in animals previously studied. Compare diagrams of nervous systems in vertebrates and articulates. Compare with the lobster, the crab and the sow-bug. Teach pupils to recognize the common characters which unite these animals in the class crustacea. Study angle-worm, as illustrating articulate type in much simpler form—body not differentiated into regions, no jointed appendages. Talks on useful animals.

Botany.—Study more obscure and difficult forms of flowers than those examined in Grade III. Flowers densely aggregated, as in sun-flower, dandelion, daisy. Imperfect flowers, as in willow, oak, chestnut. Flowers with open (gymnospermous) pistil, as in pine, spruce.

GRADE VI.

Physiology.—Briefly review work of previous grades. Special study of the eye. Anatomy of the eye. Illustrate formation of image on retina by use of a large lens. Hygiene of the eye. Injury of eye by use of light too strong, too feeble, unsteady, or improperly placed. Cultivation of near-sightedness by bad positions in reading and writing.

Zoology.—Study common insects, as the bee, butterfly, fly, beetle, squash-bug, dragon-fly, grasshopper. Compare these animals with lobster, sow-bug, and angle-worm, and recognize in all these the common character of articulates. In insects, note the characteristic division of body into head, thorax, and abdomen. Compare wings of insects as regards number, form, venation, texture. Show scales from wings of moth and butterfly under microscope. Examine the mouth parts of those insects which are not too small. Supplement observation with pictures. Under lens examine eyes of insects. Explain their peculiar structure. Metamorphosis of insects. Catch some caterpillars in the fall, and keep them in boxes in the school-room. Some of them will probably survive and appear as moths or butterflies early in the spring. Talks on injurious animals. Show how some animals are useful by destroying injurious animals —*e. g.*, insectivorous birds.

Botany.—Distinction between flowering and flowerless plants. Examples of flowerless plants—ferns, club-mosses, horse-tails, mosses, lichens, fungi, seaweeds. Show fructification of ferns. Show that the distinction of root, stem, and leaf, so obvious in nearly all flowering plants and in ferns and others of the higher flowerless plants, vanishes entirely in fungi and sea-weeds.

Mineralogy.—Study crystalline form, cleavage, color, lustre, hardness, of some of the minerals common in the vicinity of Middletown—*e. g.*, quartz, feldspar, mica, hornblende, garnet, tourmaline, beryl.

GRADE VII.

Physiology.—Senses of hearing, smell, taste.

Zoology.—Study the river mussel. Direct pupil's attention to shell (with its hinge, ligament, mantle-impression, and muscular impressions), mantle, gills, palpi, mouth, foot, adductor muscles. Compare this animal with the oyster and the clam. Note that the former has only one adductor muscle; while the latter has the mantle lobes united, forming a sack which is continued posteriorly in the breathing-tubes, or siphons. Examine some pond-snails. These will be found to resemble the preceding in their flabby, unjointed bodies, destitute of internal skeleton; but will be seen to differ in having a distinct head with feelers, and a spiral univalve shell. Examine shells of some of the sea-snails. Lead the pupils to recognize characters of Lamellibranchiata and Gastropoda, as classes of the sub-kingdom Mollusca. Contrast the Mollusca with the Vertebrata and Articulata. Give some talks on corals, sponges, and other animals lower in the scale than mollusks. Do not let the pupil suppose that the classes he has studied comprise the whole animal kingdom. Talks on geographical distribution of animals. Give a little idea of geological succession of animals.

Botany.—Geographical distribution of

plants. Uses of plants. Relation of plants to animals.

Geology.—Gravel, sand, clay. Show that these result from the disintegration of pre-existent rocks. Erosion, transportation, and deposition by water. Study gutters and puddles for illustration of action of aqueous agencies. Conglomerate, sandstone, shale. Show that these result from consolidation of gravel, sand, clay. Visit Portland quarries. Other rocks are sediments not merely consolidated, but crystallized by action of internal heat. Study specimens of gneiss and mica schist. Contrast their texture with that of sandstone and other sedimentary rocks. Still other rocks have come up in the molten condition from interior of globe—*e. g.*, lava, trap. Talks on volcanoes.

GRADE VIII.

Physiology.—Review nutritive functions, using elementary text-book. Illustrate subject with a few dissections.

Physics.—Elementary text-book. Illustrate with experiments, as much as practicable.

GRADE IX.

Physiology.—Review functions of relation, using elementary text-book.

Chemistry.—Elementary text-book. Illustrate with experiments, as much as practicable.—*American Naturalist.*

TEACH POLITENESS.

BY WM. F. PORTER.

WHEN teachers instruct pupils in politeness, they should give definite instruction as to the various polite remarks. This requires that the meaning of each remark shall be explained, and that the pupils shall be told what reply to make on being addressed in one of these remarks.

In giving instruction on this subject one morning before the three classes in the High School, the writer said to a girl seventeen years old, "What did you mean when you said 'Good morning' to me on coming in the room?" The girl hesitated for a moment and them replied, "I do not know." Some of the pupils near her showed surprise at this, and then, thinking that she ought to know, she said, "I meant the same as if I had said, How do you do?" What a blunder! Inquiring further about the room, it was found that not one-half of the pupils had a clear thought in their minds when they used the ordinary salutations of the day.

Each polite expression should be coupled closely in the pupil's mind with the one that custom has placed with it. So far as the certainty is concerned, the reply to a polite remark should be automatic. It should be as definitely and certainly known as the products are known in the multiplication tables. What embarrassment we all have suffered at some time in not having at our tongue's end the customary polite remark! The following incident is one of the many that occur every day. Mrs. A. has done a favor for Mrs. B. The two ladies having met, Mrs. B. says, "I thank you for the favor you did me yesterday." Imagine the subseqnent mortification of Mrs. A., when the latter returned, "I'm sure you are very much obliged."

Further, the teachers should see to it that these remarks are used on the play ground, and in the intercourse of the pupils in the school room; and all mistakes of commission and omission should be promptly corrected. It is all a matter of habit. If the boys and girls become accustomed to being polite they will need no watching, nor caution from the teacher, for each one by his example will be a check to the hasty and a spur to the sluggish and stupid.

The chief use of politeness among school children, as among men and women of the world, is to give pleasant expression to feeling and sympathy, and to permit individuals to rub against each other without friction.

Witherspoon says, "It is like an air-cushion. There may be nothing in it, but it eases our jolts wonderfully." It is quite probable that in no other place on earth is there so much friction and jolting to the square rod as on the ordinary play ground. There will be just as much friction after pupils are taught to be polite as there was before, but the effects will not be so bad. When one boy pushes another over accidentally, or, doing it intentionally, does the other some harm that he had not thought of, an apology or excuse will do much towards mitigating the pain of the sufferer, and exciting in his mind a feeling corresponding to that in the mind of the offender. Manliness will arouse manliness just as surely as hostility excites hostility.

Some girls and boys are quite barbarous, and still others only half civilized in their conduct. They repeatedly transgress the rights of playmates, and fail in their duty to them without a single thought of apology. The formal lessons given in the class room will open the minds of such pupils on the

subject of rights and duties, and then the habitual use of polite remarks is but a matter of time and patience.

Then through all, above all and after all, it must be borne in mind that true politeness comes only from sincerity of mind and heart. No polish of speech, nor humbling of the person, can make up for this honesty of intention. With it, a beggar is a gentleman; and without it, a prince is a boor.

SCHOOLS AND SCHOOL TEACHERS.

APROPOS—though not so intended—to some questions of national magnitude now under discussion, the following appears in the *Tribune* of New York:

While *The Tribune* cannot commend any scheme that unnecessarily adds one dollar to the city's enormous tax levy, it seems only common justice to dissent from the view expressed in the meeting of the Board of Education yesterday, that teachers' salaries should be decreased according to a ratio of decreased attendance, unless it appears that she is responsible for that fact.

Be good enough to observe that New York City is a centre of resistance to every form of proposal to aid the schools out of the national treasury. The *Times* is bitterly opposed to the Blair bill; the *Evening Post*, after pouring out its hostility by instalments, has gathered them into a pamphlet of affliction; and even the *Tribune* falls in the rear of these noble examples. Yet the very city in which these papers are printed can barely sustain its schools. It is as hard pushed to support an adequate school system as other localities are; and when its "enormous tax levy" comes into question, the schools are the first to suffer. The salaries of the teachers, already too low, are proposed to be cut more.

Such is the condition of things in New York. Yet the *Times* and *Post* have the hardihood to say that the Southern States, —in spite of their losses by the war, and their still greater impoverishment from the protracted existence of slavery, and consequent exclusion of manufacturing industry, —are "both able and willing" to do what New York and Philadelphia confessedly do not do, and practically cannot do.

Look at Maine a moment. The Bureau of Labor Statistics has just made a valuable report comparing wages in that State with those of men employed in the same occupations in England, Germany, and France. In every case but one, the figures for Maine are much above those for these three nations. Germany is the lowest, and England comes nearest to Maine, but with a considerable interval. The one exception is that of the pay of school-teachers, which in England ranges from $7.70 to $12.00 a week; in France, $7.00; in Maine, $7.05. The highest weekly wages paid in Maine are $16.50 to bricklayers, masons, and plasterers; the lowest are to school-teachers, even common day-laborers earning $8.40. In these other countries the schools are aided out of the national treasury, proceeds of indirect taxation. But in America they are supported only from local and direct taxes. *The American.*

"SENSITIVES" OUTSIDE OF PHOTOGRAPHY.

WITH the beautiful experiments at the Franklin Institute this week, showing how the sensitive films are made to repeat even the natural colors in a landscape, still-life picture or home interior, we get a quite fine perception of the delicate impressibility of some substances in nature. Running about the house, admired, petted and pampered; or abused, neglected and hardened by harsh treatment, are many other little sensitives that few people ever consider in this light. That a child will receive what is taught it, is, of course, believed. But how many mothers ever give a thought to the impressions made by tones and looks that *they do not mean* shall teach it anything? Such, however, are the things that are quickest absorbed in the unnoted education that goes on all the time. A harsh or sharp tone of voice falls upon the little ear like a blow—and like a blow it leaves an ugly bruise. How foolish in mothers who spend vast energy and thought in making their children "good," as they say, when the very means they employ, the reproofs they administer, are so many lessons in angry temper, in bristling tones, and in utter absence of self-control. They expect a tiny "tot" of five, for instance, to show forth all the virtues and all the graces, never to manifest any strength of will or ingenuity in self-amusement or courtesy, or other useful faculties. Of course, these are most agreeable when guided, and are a torment to both child and mother when suffered to go untrained, or when checked and crushed down by the superior strength of the grown person, who controls the nursery; but not herself, in her connection with it.

Yet they are its nature's gifts for making its way in the world.

To taunt and jeer at a child when it is hurt while committing some act of disobedience, is only to cultivate the worst kind of ugly revengeful feelings in the little spirit. To punish a child for following out the fullness of its little powers—instead of gently guiding the dawning faculties—is to confuse its sense of right and wrong, and to deliver it over to dullness if it is overpowered. Or else it will be sharpened to really mischievous activities by way of "getting even" with its foolish director. The more irrepressible are the natural and inherent faculties of the child, the more complete and fine a creature these powers will make it when matured. How dreadful to meet such efforts of native energy with hand-cuffs for its activities, or reviling words, that fall on its startled consciousness, as has been said, like a blow. What immense acquirements of self-control do some mothers expect of their young children, while themselves giving way to temper and passionate vindictiveness over very trifles. To teach a child *to control itself* is at once the most delicate art and the one that brings best returns to parents who can curb *themselves* sufficiently to undertake this beautiful governing from within. How often does the quotation Dr. Holmes made from the back of a mechanical toy, "*Il ne faut pas brutalizer la machine*," occur to a thoughtful mother, when she sees the more wonderful mechanism of a little child's nature submitted by its very weakness to forcible and ignorant handling?

NOT TRAINED FOR MOTHERHOOD.

Many mothers have no method at all. They do not give a solitary thought to anything beyond a momentary victory over the child by shaking it or roughly restraining it by hand or tone. There are some who take to themselves credit for never whipping their children, but whose whip lash of voice in sharp command is never at rest in waking hours. Undoubtedly the most active children are very irritating, very fatiguing at times, when it needs to be remembered that it is their fine qualities that relieve them from dullness, and will make strong characacters. When these are well understood there can be much more sympathy on the mother's part, that in itself is restful, while continuing to be watchful.

Most people are in too great haste to say "no" or "yes" to petitions, and, when compelled to retract either, are in a way to lose their influence. Punishment comes too readily, also, in many instances, when explanation or mild expostulation would help the little being to understand for itself. The tone and manner in which this is done must be perfect, however; well-balanced in yourself, if you wish to give balance to the child. Timid chidren are driven into untruthfulness the instinct of self-defense, when they should be taught, by reasoning upon it, that a lie is the one abhorrent thing between mother and child. Yet what idea of a pledged word can be had, when the mother's "yes," that should be sacred, is, upon provocation, changed to "no, then!" Or, when a too hasty "no" is, by the child's "worrying" and "holding out," merged into an altogether weak "yes."

OUT OF ALL PROPORTION.

Hasty and entirely overweighted punishments for small offences or disorderly ways teach a child concealment, when it should be open as the day to its mother's and father's confidence. Subject a grown person of any age to the constant "don'ting" with which some children are pelted, and the result would be maddening. Fancy being met at every impulse or act, and at each quarter hour of the day, with repression. The healthy impulses of the child should be trained, but *while they are being taught*, they are of much more importance than a scratched piece of furniture, a disordered room, a prying little invasion of some cherished recess in drawer, cabinet or work basket. Of course there are things that the child should not touch or spoil, but he is human, and can best be kept out of "mischief" by gentle reminders. Vehement objections, abusive tones, do not lead, they "dragoon" the little nature for the time being, and the pressure once removed, the child takes the opportunity to continue its depredations or explorations. It would be a stupid child who did not! Obedience even the most mature person renders with most grace, when it is quietly suggested, while every faculty is called into revolt by sharp, inconsiderate orders. Make your child orderly in its own nature by teaching it to love order, and to enjoy the beauty of rules for neatness, instead of rating "like a very drab," as some ignorant mothers do.

We watched a little girl who was getting her education quite rapidly, in the horse car, one late evening this autumn. The mother and two young children were coming up from the seashore, probably, and all were weary. The tired little girl tried to nestle in her mother's lap, already occupied

by the younger baby. A vindictive push sent her reeling along the seat, with "*I'll teach you* to put your feet in my lap!" From the mother's look she quite hated that child at the moment, and the little daughter, with an early sharpened look, scolded into an outlaw, will be certain to return in full, some day, both the manner and the spirit of such destructive training.—*Philadelphia Ledger.*

GOOD WORK AT HAMPTON.

THE HAMPTON NORMAL AND AGRICULTURAL INSTITUTE.

THE twenty-first year of this School opened Oct. 1, 1888, with an encouraging outlook. The enrollment Nov. 15, is 610, of whom 468 are negroes, and 142 Indians, besides eight Indian children under six years of age. With the "Whittier" (Primary) Department of 300, there are 900 pupils on the school grounds. All but 12 are boarders from abroad, representing 13 States and Territories, also China, Africa, the Hawaiian Islands and Cuba. The average age is 17 years; a little less than one-half are young women. Class rooms, dormitories, shops and tables are crowded. The spirit of the students was never better. The need of our graduate workers in the South and West was never greater. The corps of officers, teachers and assistants in all departments numbers 75. Total applications for admission this year, 812, of whom 175 girls and 310 boys were refused, chiefly for want of room. For two-thirds of the cost of its support, the school depends on the gifts of friends. Sixty thousand dollars a year must be raised by contributions.

There is in recent American history no more remarkable development than the Southern Free School System, through which it is estimated five millions of dollars are annually expended for the education of seven millions of negroes in 15,000 common schools, (over 2,000 of which are in Virginia alone), nearly two millions of which comes directly from the taxation of the negroes themselves. Competent teachers are the great and pressing need; the majority, to-day, being incompetent—many of them morally, as well as mentally, unfit for their positions. Salaries and school houses, such as they are, are ready, but the men are wanting.

In the country districts, which contain the majority and the best of the colored population, the teacher is, usually, the only fit and available leader. He, and he only, can build up Sunday-schools and temperance societies, initiate sound Christian work, overcome the hostile influence of the "old time religion" and its votaries; and, by his example, in farming and in other ways, after the few school months are over, teach the gospel of hard work, and of skilled labor. Industrial training is as important as book knowledge.

In the earlier stages of a people's progress, the teacher's sphere is on the farm, in the shops, home and church, as well as in the school-house. During the past twenty years, our army of 750 graduates and ex-students has, in the South and West, done this many-sided work among an ignorant people, eager for knowledge and needing help. Gaining self-respect, they have secured the respect and good will of all; prejudice has weakened, and peace and progress have followed them. The great majority of them are, in a small way, property-holders.

The red race of our country has advanced rapidly in the past decade, yet is still in a backward condition; but needs only a fair chance, through public and private aid, which an intelligent public sentiment alone can secure. Our exacting civilization is upon them, and progress through Christian education, or destruction from white men's vices, are the alternatives.

Of the 256 Indians returned from Hampton to their Western homes, three-fourths have done better than we had reason to expect. Of the one-fourth who have disappointed us, the majority were poor material of whom we expected nothing. The large majority are supporting themselves as farmers, laborers, mechanics, teachers, etc.; their influence is already felt for progress, and it is steadily increasing. Many more than we can accommodate are willing to come. Our ten years' work for Indians has fully demonstrated the success of practical education for the red race. Government provides the board and clothing of 120 Indians at $167 apiece. Twenty-two are wholly dependent on charity.

The cost of training a student is seventy dollars a year, which we solicit from friends. The course is four years. The scholarship of $70 does not pay for board, washing, etc., (charged at $10 a month apiece for the term of 8½ months), nor for clothing or books; but it pays the cost of tuition—the salaries of officers, teachers and industrial instructors—which the student cannot meet. Personal expenses, (board, etc.), amount-

ing to about $100 a term, are worked out, chiefly, in our thirteen shops, on the farms of seven hundred acres and in the household, sewing and other industrial departments.

Students' annual earnings amount to about $50,000, much of which is non-productive; bnt instruction is considered as important as production. In summer, from the middle of June to October 1st, all are at work; about half at school, (studying evenings), and half abroad securing the means to pay their way at school. Education by self-help is the Hampton idea.

Besides tuition, a large general expense is to be met, for which contributions are asked. The pressure for funds is constant and serious. The endowment fund, now $182,000, is slowly growing, and it will, it is hoped, be remembered by those making distribution of their property. Five hundred thousand dollars are sought as a partial foundation. Contributions may be sent by check on any bank, or by postal order, to F. N. Gilman, treasurer, or to S. C. Armstrong, principal, Hampton, Virginia.

THE DISCIPLINE AT RUGBY.

BY T. J. CHAPMAN.

THE great head-master of Rugby school, Dr. Thomas Arnold, stands out so prominently in the history of education, that his character and work well deserve study. His life has been written by the celebrated Dean Stanley, but the book is in the hands of comparatively few teachers. In this paper I desire to examine briefly the methods of discipline that he pursued at Rugby. But first let us glance at the school itself as it was in Arnold's day.

Rugby school was what is known in England as a public school, but not in the sense in which the term is used in this country. It was a foundation school, for boys only, and it was public only in so far as it was not a private institution. It was under the control of trustees. The pupils lived in the school. It corresponded more nearly to the average American college or State Normal School, than anything else among us. In Dr. Arnold's time, which extended from 1828 to 1842, the number of pupils seems to have been about three hundred. They were mostly from ten to eighteen years of age.

Dr. Arnold's endeavor in the government of his school was, in the first place to prevent the appearance of evil, and in the second place to check it promptly and vigorously when it did appear. To attain the first of these objects, he appealed powerfully to the boys' own conscience—to their sense of manliness, and honor, and truthfulness. Nothing he seemed to hate more than lying. He treated his pupils as gentlemen, and thus he taught them self-respect. He never acted the part of a spy towards them. He never tried to catch them at some act of disobedience or wrong-doing. He trusted them implicitly. "If you say so," he would say, "that is quite enough—of course I believe your word." Boys so treated must be depraved indeed if, thus dealt with, they do not grow to be manly and truthful. As the boys themselves expressed it, "It is a shame to tell Arnold a lie—he always believes one." But woe to the boy whom he discovered to be persistently or habitually untruthful!

His second means of preventing evil from making its appearance among them, was to enlist the boys of the Sixth Form as his aids. What reader of "Tom Brown" does not remember the famous Rugby Sixth and its leader, old Pater Brooke, and his speech at the end of the great game of football? The Sixth Form consisted of thirty boys. It was the highest in the school, and was under Arnold's immediate care and instruction. To these boys he gave certain power and authority over the lower forms. Fagging at school in these days has an ill odor, but as it was regulated at Rugby it was a powerful means for good. Fagging, as Arnold himself understood it, was "the power given by the supreme authorities of the school to the Sixth Form to be exercised by them over the lower boys, for the sake of securing a regular government among the boys themselves, and avoiding the evils of anarchy; in other words, of the lawless tyranny of physical strength." Against this practice there was a considerable public outcry at the time; but Arnold stood bravely by it, to the utter discomfiture of all its enemies. He felt that it was the keystone to his success. "The importance which he attached to it arose from his regarding it not only as an efficient engine of discipline, but as the chief means of creating a respect for moral and intellectual excellence, and of diffusing his own influence through the mass of the school."

Punishments at Rugby for positive evil, were sparingly used, and only when exportation, and kindness, and encouragement had proved unavailing. For the lower forms

corporal punishment was used. It "was retained," says Arnold, "on principle, as fitly answering to and marking the naturally inferior state of boyhood, and therefore as conveying no peculiar degradation to persons in such a state." This is the whole argument in favor of corporal punishment, in a nutshell. To one of the journals of that day, which had attacked Arnold on this point. he replied with his characteristic energy; "I know well of what feeling this is the expression; it originates in that proud notion of personal independence which is neither reasonable nor Christian, but essentially barbarian. At an age when it is almost impossible to find a true manly sense of the degradation of guilt or faults, where is the wisdom of encouraging a fantastic sense of the degradation of personal correction."

But Arnold's main resort in cases of persistent ill-doing, particularly in the upper forms, was removal or expulsion from the school. In the exercise of this power he used great caution, but he allowed neither trustees nor any one else to interfere in it. When he had made up his mind that the good of the school required the removal of a boy, it was no longer a subject for argument. Some years before he came to Rugby, he had written to a friend: "I would be as patient as I possibly could with irresolution, unsteadiness, and fits of idleness; but if a pupil has set his mind to do nothing, but considers all the work as so much fudge, which he will evade if he can, I have made up my resolution that I will send him away without scruple; for, not to speak of the heartless trouble that such an animal would give to myself, he is a living principle of mischief in the house, being ready at all times to pervert his companions; and this determination I have expressed publicly, and if I know myself I will act upon it, and I advise you most heartily to do the same." Act upon it he did; only that later he widened his views, and boys were sent home for many other causes than considering the work as so much "fudge." The cases that fell under this rule at Rugby, "included all shades of character," says his biographer, "from the hopelessly bad to the really good, who yet from their peculiar circumstances might be receiving great injury from the system of a public school; grave moral offences frequently repeated; boys banded together in sets, to the great harm of individuals or of the school at large; overgrown boys, whose age and size gave them influence over others, and made them unfit subjects for corporal punishment, whilst the low place which, either from idleness or dulness, they held in the school, encouraged all the childish and low habits to which they were naturally tempted." Many parents were angered by the return upon their hands of their idle or vicious sons; but it mattered nothing to Arnold. His course was determined by the good of the school as a whole, and not of individual pupils.

There was much popular opposition to and outcry against Arnold during a part of his life, but he met it fearlessly. He seemed to delight in breasting the tide. He lived down his enemies. He died in the prime of his life, universally lamented. His influence still exists, and expands in each succeeding year in ever-widening circles.

ONE AFTERNOON.

"SO you have all come to talk with me about books, to-day," said our Professor as we gathered around him in his study one holiday afternoon.

"Did you ever consider what an advantage it would be to society and to people in general if their conversation were more upon this subject of books, and less about themselves and one another? Suppose one of you meets a stranger, why not, instead of commenting upon the state of the atmosphere, turn the conversation toward the realm of books. Here, perchance, you may find many mutual friends, and a conversation which might otherwise have been dull and commonplace, becomes thoroughly interesting and instructive. Moreover, you have gained an insight into the thoughts and feelings of your companion. For if a man's opinion of the world is a confession of character, surely his opinion of books and authors is no less so. But in your conversation, wherever you are, make no pretension to more knowledge than you really possess, for I think it is an old Persian proverb which says, 'A wise man knows an ignorant man, because he has been ignorant himself; but the ignorant cannot recognize the wise, because he has never been wise.'"

"But, Professor," interrupted the youngest of our company, who knew well our good instructor's habit of wandering from his subject, "will you please tell us how much and what sort of reading we college students ought to do?"

"Well, my young friend," replied the Professor with one of his kindly looks, "your question is one which has been agi-

tating the minds of some of our wisest men, and I am almost inclined to think that each student must answer it for himself, to suit his own individual case. Not that you may not gain many valuable aids to your decision from consulting the experience of older minds. Perhaps you have been reading in our periodicals of recent date the articles written by some of our leading literary men upon the books which have helped them. There, you no doubt found widely different views as to what particular books young people should read, but in all cases did you not observe that it was the few books which were read, remembered, and *thought about* that helped the most? It matters not so much what we read and how we read, as what we think and how we think it."

"I think you said the other day that you did not approve of our reading much in magazines and newspapers. Please tell us why, Professor," suggested one of our incessant readers.

"Young people, especially students, are apt to read merely for entertainment and pleasure, and consequently read anything that chances to come in their way. Few things weaken the memory more than light and miscellaneous reading. For this reason I would especially discourage the promiscuous and constant perusal of newspapers and magazines. After reading for hours, you will most likely find that you have only a confused mixture of ideas and vague images. You read without the intention of remembering, just for mere pleasure or recreation, but every time you thus crowd the memory you weaken its powers and lose your control over it. This reminds me of what Petrarch says, 'We ought to regard books as we do sweetmeats, not wholly to aim at the pleasantest, but chiefly to respect the wholesomest, not forbidding either, but approving the latter most.'"

"Now you wish to know how much you should read? The habit of constant reading is a commendable one, and through it lies the only sure way to learning, the only means of becoming acquainted and familiar with the thoughts and feelings of the wise men who lived in ages past. The student who considers attentively the writings of a powerful mind, is made to feel that he can and will make his mark in the world. The speeches of Hamlet, in Shakespeare; the voice of the orator from the Senate, the words of wisdom from the pulpit, and above all the overwhelming torrent of clear thought, in burning language, which the masters of ancient times poured forth, will rouse the soul, and call all your powers into action. Furthermore, by thus bringing your mind under the direction of another mind, you have not only your thoughts, but your mode of expression influenced. You soon learn to know how a strong, a nervous, or a beautiful writer expresses himself. Suppose you spend a fortnight reading productions from the pen of Johnson, do you not find yourself in your writing unconsciously catching his dignified step and gait? Be as careful not to read a book which would vitiate your style, as you would be not to associate with those who would corrupt your manners.

"All distinguished men have been given to the habit of constant reading. It is told of Plutarch that he felt unhappy if at some time during the day he did not read or write. One of his friends out of anxiety for his health once begged him to lend him the key of his library. Plutarch reluctantly complied with the request. His friend locked the library and forbade him to read anything for ten days.

"The poet consented, but the first day seemed longer than a year, the second found him with a raging headache, and by the third day he was in such a fever that his friend, touched by the situation, restored the key, and with it health and spirits. By constant reading I do not mean rapid reading, Some one who has a deep insight into the nature of man, says that he never felt afraid to meet a man who had a large library. It is the man who has but few books, and who thinks much, whose mind is best furnished for intellectual operations. If a student would improve by his reading, he must be very deliberate. The careful reader makes the clear thinker, and the clear thinker the exact writer. The ancients had a certain advantage over us in the fewness of their books. 'They had no catechism but the creation, needed no study but reflection, and read no books but the volume of the world.' Then, a book to be owned must be copied with a pen, and he who thus transcribed a book for the sake of possessing it, would have a pretty good idea of its contents. What a wide difference between their age and ours! We might be greatly benefited by taking to heart the old Latin maxim, '*Aliud enim est scire aliud sapere.*'"

Suddenly the Professor paused. Silence reigned supreme for several seconds, then thanking our kind friend for his words of practical wisdom, we said "adieu."

Swarthmore Phœnix.

CONCERNING NARROWNESS AND BREADTH IN TEACHING. *

BY DR. B. A. HINSDALE.

IN its earlier stages successful teaching must conform to the following criteria: 1. A strict limitation of the number of subjects taught at any one time. 2. A strict limitation of the number of facts and ideas pertaining to any one subject, or to any part of it. 3. A strict limitation of the time consecutively devoted to any subject; and 4. The frequent repetition of the facts and ideas taught.

An explication of these criteria, with a statement of some of the reasons upon which they rest, will form the subject-matter of this lecture. As the first and second rest on the same facts, they can be discussed together.

To fix some permanent impressions in the child's mind is the great duty of the teacher, and the first one on the child's entering the school. This duty is accomplished by making repeated presentations of the same object, fact, or idea to its mind. While some of our mental impressions are caused by single intense acts of presentation, the great majority are caused by many feeble acts; a statement that should be emphasized when applied to young children, who are at once impressible, but not retentive. Sometimes Nature affects us as the trip-hammer affects the mass of hot iron upon which it falls; but commonly her strokes upon the senses and so upon the mind are rather to be likened to those made by the tiny hammer in the hands of the worker in *repousse*, no one of which is perceptible. If many objects are presented to the young mind at the same time, or if objects are presented in too rapid succession, or if the same object is presented in such succession, the resulting impression will be confused and feeble; whereas, if the same object is presented many times at suitable intervals, or if several objects are presented at such intervals, in the same way, definite ideas will be formed constituting a permanent part of the furniture of the mind. If a trained man be carried around a church or other large building, he will at most form a very imperfect idea of the church; but if he walk around it slowly, taking time to fix every side and feature in his mind, he will form a complete mental picture. The child that devotes all his time at every reading lesson to turning over all the leaves of his primer, will never learn to read; but the child that fixes his attention on one very short lesson, going over it again and again, then advances to a second lesson, and so on, will soon gain that accomplishment. "The child must be accustomed to give one impression time to take root," says Radestock, "and not follow it immediately by a corresponding action, that it may not pass away with that action into air." This is also true of thought or reflection. The same logical train must run over the same track once and again, which is impossible if the track is filled up with trains. Too many trains on the mental railroad at the same time means collisions, wrecks, and confusion. Thus, the repetition that is the mother of studies closely limits the objects of knowledge presented, at the same time that it demands repeated responses by the mind to the same object, or, what is the same thing, attention. The Scriptural admonition, "line upon line, precept upon precept," is accompanied by the admonition, "here a little and there a little;" all of which is excellent pedagogy as well as morals. Radestock is right in calling this quotation from Lazarus "relatively true:" "Deep thinking requires time; it is therefore a great pedagogicial mistake if teachers —as is now generally done—urge their pupils to answer rapidly, and praise those who immediately have an answer ready. This causes everything to be lowered to a mere effort of mechanical memory. The pupil should be given time for individual contemplation, for deep and energetic thought-labor."

The third criterion, which plays a very important part in rational teaching, may be separated into these elements:

(1) When any stimulus, say a lesson, is presented to a child, a little time must elapse before his mind becomes fully energized; (2) This state of fullest energy cannot be long sustained; (3) The mental current falls off to a mimimum, but less rapidly than it swelled to its maximum. These facts, however, are in no sense peculiar to children. It is impossible to state definitely how long a time is required fully to energize the mind, or how long a maximum of energy can be maintained; much depends upon the child, his mind, age, training, etc., and the nature of the subject; but they are both short, the second, of course, being longer than the first. From these premises two conclusions follow that may be called rules of primary teaching.

* Report of a Lecture delivered to the class in the Theory of Teaching, University of Michigan.

First, the child should be held to the same subject so long as the mental current continues at full volume.

Second, Before the current begins to abate, the child should either pass to another subject or be released from further application.

Unnecessary changes from subject to subject involve loss of time and also of power; but to overwork a faculty, or to insist upon further work when the mental force is abating, is a waste of power. It is the flood tide that brings the great ships up to the dock. The physiological psychologists find the explanation of both these rules in nerve action. Dr. Alexander Bain, for example, says: "We know well enough that the nervous currents when strongly aroused in any direction tend to persist for some time. In the act of learning, this persistence will count in stamping the impression, while part of the effect of a lesson must be lost in hurrying without a moment's break to something new, even although the change of subject is of the nature of relief." Perhaps it is not needless to add that there will be practical difficulties in carrying out these rules in the school; at the same time, general conformity to them is possible.

Here we are met by another mental fact or law of much interest and importance. Mental weariness or exhaustion is of two kinds, specific and generic. The first calls for rest from certain kinds of mental work; the second for rest from all kinds of work. There comes a point beyond which the teacher should not require work in a particular study, also a point beyond which he should require no work whatever. But we must note particularly that diminishing power for one kind of work does not commonly mean diminishing power for all kinds of work. Thus, a pupil who has studied arithmetic to-day as long as is profitable, may take up geography with full strength and interest; or *vice versa*. Studies may be likened to those gases which are vacuums with respect to one another. A jar will hold as much carbonic acid gas as though it were not already full of hydrogen; and similarly a mind will contain as much arithmetic as though not already full of geography, provided the two studies are properly taught. Men of disciplined minds pursue specialties; but the history of specialists shows that so far from the highest attainments in one line of research being incompatible with respectable, and even high attainments, in another line, they are rather augmented thereby. A physicist must also be a mathematician, a Latin scholar, a Greek scholar. In fact, a specialist in the strictest sense of the term is an impossibility. But children, with their feeble power of attention, cannot be confined to one subject any more than they can take in all studies. The one-study school is just as unphilosophical as the courses of study that break up the hours of the school-day into mere crumbs of time. A middle course must be pursued, and so pursued as to avoid confusion. A good deal of evil in the school that is charged to over-work, should be carried to the account of work that is done in the wrong way.

Some very important practical questions arise at this point. How long should a pupil be kept at work on the same subject or lesson at the same time? How much work should he do in one school day? How frequently should he change from one subject to another? How many studies should he have? No one can answer these questions in formulae; they must be answered on the spot by the superintendent and teacher. Such approximate answers as may be given will not here be attempted, but two practical observations will be offered. These questions call for the teacher's closest observation and best tact; and it may well be doubted whether the common schools are not now sacrificing, measurably, the best results to overfull programs and too-short exercises, resulting in too much talk and too little study. The question is one that the superintendent should study with a transcript of the facts now stated in one hand, and a copy of his course of study and time-table in the other.

Dr. Bain thus presents the necessity of the teacher's observing a strict limitation of matter:

"Undoubtedly, the best of all ways of learning anything is to have a competent master to dole out a fixed quantity every day, just sufficient to be taken in, and no more; the pupils to apply themselves to the matter so imparted, and to do nothing else. The singleness of aim is favorable to the greatest rapidity of acquirement; and any defects are to be left out of account, until one thread of ideas is firmly set in the mind. Not unfrequently, however, and not improperly, the teacher has a text-book in aid of his oral instruction. To make this a help, and not a hindrance, demands the greatest delicacy; the sole consideration being that the pupil must be kept *in one single line of thought*, and never be required to comprehend, on the same point, conflict-

ing or varying statements; even the foot notes may have to be disregarded, in the first instance. They may act like a second author, and keep up an irritating friction."

The judicious Sunday-school teacher will not teach a middle grade class the two or three parallel accounts of the same transactions recorded in as many Gospels; to attempt such a thing will lead to confusion, while by confining the class to one account, a single line of facts and ideas will be firmly set in the mind. Comparison of parallel narrations belongs to a later stage of Bible study.

Few subjects need to be studied by the teacher with more care than his relation to the text-book. Obviously, in the early stages of education two text-books on the same subject would be preposterous; they would breed endless confusion and darkness. Dr. Bain is so scrupulous as to exclude the use of foot notes, in the first instance, even in the cases of pupils old enough to use books with foot notes. "They may act like a second author, and keep up an irritating friction." But what is to be said of a teacher who is himself not simply foot notes, but a whole text book? Now the confusion and darkness are vastly greater than before. The book and the teacher cannot be co-ordinate; one must be strictly subordinated to the other so far as furnishing subject matter is concerned; for in no other way can the pupil be "*kept in one single line of thought.*" If a book is the main source of instruction, the teacher's business is to *teach the book.*" These more definite remarks will prove helpful to the practical teacher:

1. The teacher must keep in the line of ideas followed by the book. Something more or less may be allowed at times, but in no case *anything different.* That is a bad state of affairs when the class say, "The book says so, but the teacher so." By opposing himself to the book, the teacher commits two mistakes; he destroys the pupil's confidence in the book, and so his interest in it; and he engenders confusion and weakness.

2. The teacher should follow the methods of presentation employed by the book, otherwise his train of thought will collide with the book's train.

3. The teacher will study to make the first presentation of the subject successful. This is important for a double reason, or at at least a reason that may be stated in two forms.

The mental power expended by a pupil on the unsuccessful presentation, is wasted, and more than wasted; the debris of this presentation "litters up" the mind, and so stands in the way of a second one. This is the reason why it is often more difficult to teach a subject to a pupil to whom it has been imperfectly taught than to one who knows nothing about it.

4. The wise teacher will not present a subject in more than one way, provided his presentation has been successful. It is folly to explain the division of a fraction by a fraction in a second way, if the first has been understood. It is well enough, perhaps, for the author of an arithmetic to give two or more methods for finding interest; but the teacher should use only one with the pupils the first time over the work. Never give, at the stage of teaching now supposed, more than one definition or rule. Again, superfluous illustrations not only do no good, but they do harm, begetting confusion worse confounded.

5. If the subject matter of a lesson is radically bad, or if the method of the book is decidedly faulty, the capable teacher will do well not to assign the lesson from the book at all, but to teach it himself *de novo.*

It should be observed, that the end of teaching is the matter taught and the habits of mind thus created; methods of teaching are simply ways or modes of reaching that end; and the teacher who has come to think more of the method than of the end, as some do, needs to orient himself.

The superiority of the traditionary "Man of One Book" finds its explanation in the considerations now presented.

The criteria thus explicated exclude all "broad" teaching from the earlier stages of education. But the pupil will be able progressively to get out of his "one single line of thought." He will be able to deal with more subjects, and with more ideas about the same subject. He will at last be able to consider with advantage different definitions of the same thing, divergent views, conflicting processes, and a variety of methods. He may now consult several text-books. In the essay already quoted from, Dr. Bain thus presents the pupil's march of progress:

"Our first maxim is, 'Select a text-book-in-chief.' The meaning is, that when a large subject is to be overtaken by book study alone, some one work should be chosen to apply to, in the first instance, which work should be conned and mastered before any other is taken up. There being in most subjects a variety of good books, the thor-

ough student will not be satisfied in the long run without consulting several, and perhaps making a study of them all; yet it is unwise to distract the attention with more than one while the elements are to be learned. In geometry, the pupil begins upon Euclid, or some other compendium, and is not allowed to deviate from the single line of his author. If he is once thoroughly at home on the main ideas and the leading propositions in geometry, he is safe in dipping into manuals, in comparing the differences of treatment, and in widening his knowledge by additional theorems, and by various modes of demonstration."

Dogmatism and authority will now recede into the background, and the teacher will play a new part. He will contribute more freely than before of his own stores of knowledge, and will more and more discuss subjects with his pupils. Varying views and conflicting arguments will receive due attention. Education has at last entered upon its critical stage. If the student continue to advance, he will become able to follow a wide treatment of subjects from the time he takes them up, handling divergent definitions, conflicting principles, contradictory facts, and complicated lines of reasoning, from the very first. But such ability is the result of much study and of long training.

Broad training is the true goal of education. But the road leading up to it, particularly in its earlier stages, is narrow teaching. Broad teaching in the beginning will defeat broad teaching in the end. Just enough knowledge well presented will make a lodgment in the mind and will create discipline; a flood of knowledge poured over the young student, will make no lasting impression. Teaching everything is teaching nothing. The "inundating" teacher, the teacher who lets the knowledge down like a shower-bath, defeats his own end in a lower grade school. A hose-pipe is not the best instrument to use in filling a wine-glass. Fine scholars sometimes fail as teachers because they make their work too broad and discursive; while very ordinary scholars often succeed, particularly in lower grades, if they are clear in their thoughts and statements. The first are hindered by breadth, the second are helped by narrowness.

The terms "narrow" and "broad" are here used in a relative sense. To give them quantitative content is impossible. I must depend upon the good sense of the reader, taking them in connection with the subject matter and their contents, to assign to them their proper meaning.—*Moderator.*

RELATION AND DUTIES OF EDUCATORS TO CRIME.

REV. J. BITTINGER, D. D.

IT is hardly too much to say that the American people have been in danger of falling into the error of believing that knowledge is virtue; that to do better it is only necessary to know better; and that intellectual culture is the panacea for moral, social, and political ills. The general establishment of the common school system was both the effect and the cause of this sentiment. Of late there has been some reaction against this one-sided view of the human problem of reform and progress. In the quickened interest in all social questions, together with the increased study of statistics and their application to the solution of the various questions of sociology, education as related to crime has not escaped the students of science, and especially those who are interested and engaged in penal reform. It has been clearly shown that ignorance and crime live in close and sympathetic relations. Criminal statistics have proved that, in proportion to their numbers, there are more criminals among the ignorant than among the educated. Ignorance exposes to crime by diminishing men's self-respect; by limiting men's opportunities or means of livelihood; by restricting the range of pleasure and safe pastime; and by exposing men to the full play of their animal passions.

But while all this is true, and a more extended study serves to deepen the conviction that ignorance is the most fruitful source of crime, it still remains true that ignorance is not the only source of crime. A deeper study of criminal statistics, and a more careful classification of criminals, brings to light the fact that there are educated as well as uneducated criminals. Forgery, counterfeiting, embezzlement, perversions of trust, and also adulterations of food and drink, are not crimes of ignorance, but rather of knowledge. The same must be admitted of bribery, tampering with the ballot, either by fraudulent naturalization papers, by colonizing voters, or by stuffing the ballot box. There may be ignorant dupes in all these organized and wide-reaching villainies; but the leaders are neither ignorant nor duped. The man who plans a scheme of counterfeiting is never an ignoramus, whatever may be true of the "shover of the queer." He has both capital and knowledge. In general, it may be said

that between the two great classes of crimes —crimes of passion and those of reflection —crimes of reflection are committed by the intelligent rather than by the ignorant. Animal passions are less active among them, but the higher passions of the mind—covetousness, ambition, the desire to live extravagantly and to keep up appearance and show —are passions which rage among the cultivated rather than the uncultivated; and the crimes to which they lead are not petty larceny and sneak-thieving, but peculation, political jobbery, and ring frauds.

If the general influence of education is to lessen crime, and yet its exceptional influence is to enlarge the scope of a certain class of criminals, what, under these circumstances, are our relations and duties as educators, to crime.

First, we must acknowledge and teach that there are educated criminals, men who use their intelligence as a power to do wrong, taking criminal advantage of this superiority of knowledge over ignorance.

Second, we must teach that this class of criminals is the principal perpetrator of crimes of reflection—crimes, as has already been shown, that are aimed at property rather than persons; crimes, moreover, which attack society in its organized welfare, by debasing the currency, adulterating food, drink, and clothing, manufacturing goods "short," and selling them at standard weight and measure, and by corrupting the channels of legislation, justice and politics.

Third, it must be held to be the duty of educators to elevate the moral tone of their pupils by showing that many forms of fraud, which are not against the statute and which lead to wealth, are more debasing and more injurious than crimes of a more disreputable character. This latter kind of education is carried on more by example than by formal precepts, the educator himself being the example. Next to parents, teachers stand in the closest and most influential relations to the young; and as their toils tend to take persons out of the ranks of illiteracy and put them in the educated class, so the crimes with which they stand most closely connected are the crimes of educated as opposed to uneducated criminals.

There may be and ought to be exerted by educators a direct influence in the repression of crime. When Dr. Arnold said to his pupils that it was not necessary that he should have four hundred boys at Rugby, but that it was necessary they should be gentlemen, he expressed the grand truth that a teacher should make his school a reformatory. The proper soil of crime is a low moral tone in society; and when the teachers in our common professional schools, our academies, colleges, and seminaries, do not create and diffuse a healthy moral atmosphere, the seeds of crime will germinate despite the intellectual and æsthetic culture of the schools.

In addition to these direct and indirect influences which educators should exert against crime, the time has come when positive instruction in penology is practicable. Sociology is a recognized science, and crime in its causes and origin is one of the departments of sociology. The body politic is liable to diseases. Crime is such a disease; and in a republic it is an important part of every young man's education to know that criminals are an integral part of the population, and that they demand wise treatment. What is needed here is knowledge, the knowledge of how men become criminals, how they should be treated, and what results may be looked for. There was a time when criminals were simply ignored by the community, till dragged into light by the arm of justice. For a few days they occupied the court, then disappeared within prison walls, to be forgotten by the outside world. No one stopped to inquire or seemed to care whence they came or whither they went. Were they born convicts? Were they made such by others, or did they make themselves criminals? Still less did the community ask or believe that possibly these men might come out of jail better men. A penitentiary was not, as its name implied, purgatory, but perdition. Elizabeth Fry, Maconochie, Montesinos, and Obermeier have proved that there is use for this human refuse. Criminals can be reformed—from 50 to 75 per cent. of them. It has been demonstrated that the laws of justice, of industry, and of kindness, when administered by men of faith, are as effective for reform inside of a prison as outsider. Onesimus was converted in prison: so was the Philippian jailer. Who can tell what converted jailers and their convicts might not teach us of the power of the gospel wisely applied? Well does Charles Dudley Warner say: "I do not know what might not be done for the viciously inclined and the transgressors, if they could come under the influence of refined men and women. And yet you know that a boy or girl may be arrested for crime, and pass from officer to keeper and jailer to warden, and spend years in a career of vice and im-

prisonment, and never once see any man or woman officially who has tastes or sympathies or aspirations much above that vulgar level whence the criminals came." We set a thief to catch a thief, and then employ a rogue or a ruffian, or both, to take care of him. Is it a wonder the criminal does not reform, with such keepers? It would be a greater marvel if he did. It is the duty of educators to exhibit such things to their pupils, and to make them feel that criminals have rights, inalienable and indefeasible; that criminal legislation should recognize these rights; and that penal treatment is nothing less than offense itself, if it does not regulate itself by these principles.

It is only necessary, in conclusion, to add that the field of penology is a wide field, and one that is worthy the attention of all good men in the field of prevention and reformatory measures, Elizabeth Fry, John Pound, William Nash, De Metz, Miss Carpenter, and Emily Faithful, have won names of high honor. As prison-keepers and reformers, the names of Hill, Crofton, Maconochie, Pillsbury, Brockway, and Cordier, are known and honored everywhere. In the speculative departments of criminal jurisprudence, Bentham, Beccaria, Quetelet, and Livingston are immortal. Where John Howard has led, no educator need be ashamed to follow. But a greater than John Howard is here—Jesus of Nazareth, who was anointed to preach deliverance to the captives, says to the righteous, "I was in prison, and *ye* came unto me."

EDITORIAL DEPARTMENT.

THE SCHOOL JOURNAL.

LANCASTER, MARCH, 1889.

E. E. HIGBEE. - - - - J. P. McCASKEY.

"Ye may be aye stickin' in a tree, Jock; it will be growin' when ye're sleepin'." *Scotch Farmer*

THE West Chester State Normal School has also taken earnest hold of instruction in manual training, the trustees having already engaged the services of one of the professors in the Philadelphia Manual Training School who will give instruction as an expert in this department.

Superintendent George J. Luckey, we are glad to learn, has, under the pressing solicitation of his many friends, consented to allow his name to be used as a candidate for Commissioner of Education of the United States. He is specially qualified for the position. No one has given more careful attention to the subject of comparative school statistics, and no one is more familiar with the inter-State relations of our schools, for this has been with him a special study. Moreover, his genial nature particularly fits for influencing large bodies of men, and for securing in this way needed legislation. But why continue? The candidate is too well known among us to need commendation. We trust and hope that he may secure the office, assured that he will administer it with masterly ability. In this we reflect, without doubt, the unanimous sentiment of all the school men of Pennsylvania.

THE very large attendance of teachers at the Pennsylvania Summer School of Methods, held by Miss L. E. Patridge, at Scranton, and at Schuylkill Haven last season, and the desire expressed from many quarters that the school should be continued during the present season, are all that is needed to insure the success of the same as announced for the approaching summer. The good work done at the school has been such as to awaken interest in the minds of teachers by suggesting better methods of instruction, broadening their field of view, arousing enthusiasm, and enabling them to measure more truly the character and importance of the work they have undertaken. Two sessions of three weeks each will be held, the first at Altoona in July, and the second in August at Norristown. The first session will be held immediately after the meeting of the State Teachers' Association. The advertisement of the school, as found elsewhere in this number of *The Journal*, will afford further information. Miss Patridge may be addressed at Reading, Pa.

WE have had the pleasure of hearing Mrs. H. E. Monroe's illustrated lecture "Christ in Art," and very heartily commend it to Superintendents who are looking about for profitable evening entertainments for their institutes. The lecture itself is one that it is good to hear, and the pictures are photographic reproductions of a large number of the finest paintings in the world—things which once seen can never be forgotten. An entertainment like this is vividly remem-

bered while life lasts, and hence its great value and importance. The lectures upon the City of Washington and the Civil War, each with sixty or eighty well-chosen and excellent illustrations, are also such at to attract and instruct large audiences, and especially when made up largely of teachers.

THE NEW NORMAL SCHOOL AT CENTREVILLE.

ON Friday, the 1st of February last, the new Normal School buildings of the eleventh district, located at Centreville, Butler county, were inspected, accepted by the Superintendent of Public Instruction, and formally dedicated with appropriate ceremonies held in the chapel. It is expected that all the necessary arrangements will be completed in time for the immediate opening of the school.

Centreville is a pleasant little town of about five hundred inhabitants. The grounds of the new school consist of a plot of ten acres on a slight elevation in the southern part of the town, which will doubtless become a beautiful campus. The buildings are of wood, plain yet neat in exterior, and admirably arranged within for the uses to which they will be put. They are three in number, viz., a main building, containing eight recitation rooms and an auditorium, or chapel, which will seat one thousand persons, and on either side, to the north and south, a dormitory, one for gentlemen students and one for lady students. The latter building contains the dining hall in addition to sleeping apartments. The dormitories have accommodations for 300 students. All of the buildings are heated by steam, the fuel used being the excellent natural gas of this locality, which will also be used for the purpose of illumination. Water is supplied from a well on the hill above the buildings. The committee of inspection not only expressed themselves as entirely satisfied with the buildings and their appointments, but very justly complimented the people of Centreville and the vicinity on the zeal and liberality through which a work of this character had been accomplished within the space of a single year.

The occasion brought together a notable assemblage, which made this day one long to be remembered by the citizens of Centreville. It was estimated that there were gathered into the auditorium fully fifteen hundred persons. Ex-Senator John M. Greer was called to the chair. Addresses were made by Governor Beaver and a number of other gentlemen, including the chairman of the meeting.

The outlook for this school, which will bring the number of our Normal Schools up to twelve—leaving but one district, the fourth, unprovided with a school—is considered very promising. It is thought that it will open with an attendance of fully 200 students. The admirable work already done by the citizens of the town—particularly by the ladies—and their manifest desire to forward the interests of the school by every means in their power, are an ample guarantee that nothing will be left undone to make the temporary residence of students in their midst pleasant as well as profitable. Under the charge of an efficient corps of teachers, this school should become one of the most popular in the State. The following report of proceedings is from the Butler *Democratic Herald:*

About a year ago the people of Centreville and vicinity concluded to have a State Normal School. They went to work, raised the money, secured the grounds and erected the buildings with a promptness that surprised everybody. When the buildings were completed the Department of Public Instruction was notified and a committee asked for to inspect the property. In response Superintendent Higbee appointed Hon. Wm. McNair, of Oil City; Hon. S. H. Miller, of Mercer; Col. S. J. Marlin, of Brookville; and Col. S. M. Jackson, of Apollo, as a committee to act with the Superintendents of the various cities and counties of the Eleventh Normal School district, to inspect the property and make a report to the State. Friday, February 1st, was the day set for the inspection. The whole town had on its gala dress, many of the citizens had decorated their houses in an artistic manner, and everybody seemed anxious to make everybody else feel at home. To that end the people had appointed the following reception committee: John Reed, Chairman: J. T. Bingham, Secretary; A. W. Christie, W. S. Bingham, Wm. Bingham, Wm. Crocker, J. H. Christley, John Campbell, W. H. Uber, Thomas Rhodes, H. E. Bard, Norman Patterson, W. G. Morrison, Thomas Wilson, J. N. Watson, Harvey Rodgers, Hon. J. M. Thompson, J. W. Brown, W. D. Rennick, and J. W. Grooves.

Col. Marlin and Supt. Dean were among the first arrivals on Thursday. Prothonotary Brown, Will Heineman, of the *Times*, W. A. Beer, of the *Herald*, and a number of others also came in on Thursday. Dr. Higbee and the other members of the committee came in on Friday morning, and by ten o'clock the town was full of strangers.

The inspection committee met at the Eyth House and organized by electing Hon. S. H. Miller, of Mercer, chairman. They then proceeded to the grounds and began the inspec-

tion in the basement of the main building. Before 12 o'clock they had made their rounds and met in a room in the Ladies' Dormitory, while the people proceeded to get their dinners. The good women who had charge of the dining-room were kept busy for several hours attending to the multitude which came for dinner. While dinner was in progress it was quietly made known that the committee had decided upon a favorable report. A few moments after the committee had concluded its deliberations, the side entrance to the dining-room was thrown open, and a storm of applause from the people announced that Governor Beaver had come. He passed up to the head of the hall and, after a few moments' rest, joined the committee at dinner.

Shortly after 1 o'clock the people began to crowd into the chapel. At 1:30 the Cornet Band opened up the exercises by a few well chosen airs. About 2 o'clock the committee filed into the auditorium, followed by the Governor, who was greeted by cheers. After the Governor was seated on the rostrum, and the members of the committee were seated around him, the band played a medley of patriotic airs. Dr. Benjamin Pearson called the meeting to order, and moved the election of Hon. John M. Greer Chairman of the meeting. Mr. Greer, on taking the chair, called on Rev. Paden to lead in prayer, after which the Chairman made a brief address and introduced the Chairman of the Committee on Inspection. Mr. Miller reported that their committee had found the work done according to law, and that the property of the Slippery Rock Normal School Association had been recommended to the State as entitled to its benefactions. He said this was all the law required them to do, but that by a unanimous vote they had passed a resolution commending the people of Centreville and vicinity for the wonderful work that they had accomplished.

Addresses were made by the following named persons: Governor Beaver, Dr. E. E. Higbee, Hon. Wm. McNair, Col. Marlin, Col. Jackson, Supt. Hamilton, Supt. J. M. Reed, Supt. Morrow, Supt. Collier, Supt. Dean, Supt. Knight, Prof. Dodds, Secretary of State Chas. W. Stone, Dr. Ketler, of Grove City, Principal A. J. Davis, of Clarion State Normal School, Prof. McClymonds, of Edinboro, Supt. Mackey, of Butler, and Supt. Snyder, of Butler county. Governor Beaver spoke in his happiest vein, and in his brief speech said some good things about energy, enterprise, and citizenship. The other speeches were all appropriate to the occasion. Prof. I. N. Moore, on behalf of the Y. W. C. T. U. of Centreville, presented a splendidly bound copy of the Holy Scriptures to the Normal Association. Rev. Mr. Wright accepted the Bible in behalf of the Association. The rooms were tastefully decorated with evergreens and flags. The word "Welcome" was in evergreen above the rostrum, and "Long live our Governor," on a banner in the rear of the hall. The Chairman made a few remarks and then pronounced the meeting adjourned. It is estimated that the audience numbered at least fifteen hundred people.

An impromptu meeting was held in the chapel on Friday night, at which several hundred people were present. Superintendent Snyder called the meeting to order, and after some appropriate remarks, was followed by Prof. Fisher, of Fairview; Prof. Galbreath, of Hillsboro, Lawrence county; Prof. I. N. Moore, of Centreville; Prof. Howard, Dr. A. M. Patterson, and Thomas Coulter. Refreshments were served in the dining hall. It was a proper termination of a busy and important day's work.

The stockholders elected the following twelve trustees, who, at present writing, are organized as follows: George Maxwell, President; John C. Kerr, Vice President; Dr. C. W. Bard, Secretary; Neyman Christley, J. E. Bard, Dr. A. M. Patterson, Dr. Benj. Pearson, Lewis Patterson, Wm. Kauffman, T. S. Coulter, T. E. Patton, and H. P. Griffeth.

MANUAL TRAINING.

PROVISIONS OF BILL PROPOSED BY INDUSTRIAL EDUCATION COMMISSION.

THE comprehensive bill prepared by the Commission on Industrial Education, was introduced some two weeks since in the House of Representatives at Harrisburg, by Hon. Theodore W. Bean, of Norristown, a member of the Commission, and Chairman of the House Committee on Education.

The bill provides that a sum of money not exceeding one-sixth of the amount of school tax collected in any year in any school district, may be expended for the establishment and maintenance of a school of manual training, including industrial drawing and designing. The school authorities will be authorized to construct and maintain buildings, class rooms and workshops for operations of training in the mechanical and domestic arts, and to provide necessary material, machinery, tools, equipment and appliances for the instruction of pupils of both sexes in the elementary branches of woodwork, metal work, domestic economy and industrial art.

The Superintendent of Public Instruction shall prescribe one course of exercises in each of the branches of instruction mentioned, which shall be adapted to the requirements of graded schools, beginning with pupils not less than 10 years of age, and continuing through each of the successive grades established from time to time. There shall be another course for ungraded schools. The exercises in each course shall not require less than two hours nor more than six hours per week. Whenever any

number not less than one-fourth of the adult inhabitants of a school district shall petition the school authorities to introduce a branch of manual training, they shall at once proceed to do so.

Whenever in any school district a sum of money not less than $500 shall be raised by special school tax or by subscription, or both, for the establishment or maintenance of a manual training school, a sum equal to the amount so raised, but not exceeding $3000 in any year, shall be paid to the district from the State Treasury, provided that the whole amount so paid out of the Treasury shall not in any year exceed $100,000. School authorities of adjacent districts may unite the funds raised by them in either of the ways provided for, or any portions thereof, under regulations mutually agreed upon and approved by the State Superintendent, for a school or schools of manual training or to employ instructors of such training in some or all of the ordinary schools. No State money appropriated for manual training shall be used to teach any specific trade. The manual training may be taught in evening classes, open to all pupils of school age residing in the district, whether enrolled in the public schools or not. Whenever any building shall be erected or re-arranged for public school purposes, a suitable room or rooms shall be provided therein for manual training.

Every Normal school connected with the public-school system, shall establish not later than the opening of the fall session of 1889, and thereafter regularly maintain, a course of instruction, prescribed by the State Superintendent, in the elements of woodwork for all pupils in the regular courses, to be so graded as to include not less than forty exercises of two hours each, not more than three of which shall be held in a week. Instruction in sewing, cooking, etc., shall be prescribed for young women, and in metal work for young men. Each Normal School is to receive $5000 from the State for the necessary buildings, machinery, tools, etc., and $2000 annually for the maintenance of instruction, including industrial drawing and design. After April 1, 1890, no certificate or diploma for teaching shall be granted by any Normal School to any graduate or other person who shall not have completed a course of training in woodwork, equivalent to at least sixty hours, nor shall any city, county or borough Superintendent grant any such certificate after June 1, 1892, to any person who shall not pass a satisfactory examination in that training.

THE LESSON OF PATRIOTISM.

OBSERVANCE OF WASHINGTON'S BIRTHDAY—PRESENTATION OF FLAGS TO SCHOOLS.

THE flag symbolizes nationality, and should be dear to all good citizens. Our boys and girls should be educated to know it in its splendid history, to love it for what it means to ourselves as a nation, and to revere it for its vast promise of good to the human race. Patriotic songs should be sung in our schools, lessons in patriotism given everywhere. Days memorable in our national history should not be permitted to pass unnoted. The flag-staff upon the school building and the national colors displayed therefrom to commemorate great events in our history on their recurring anniversaries, would have a most wholesome influence, not only in arousing the interest of pupils, but also in quickening the patriotic instincts of the community at large. We do not mean that the flag should float from the staff all the while—to be worn to tatters, then put aside and thought of no more; but that it should be preserved with care, displayed on special occasions, and always to emphasize some event great or glorious in our national history.

It was a good thought of some one connected with the order of American Mechanics or of the order of Patriotic Sons of America to present flags to the schools. These orders are very strong in many localities, and they have distributed hundreds, and indeed thousands, of beautiful flags. Their action in Lancaster is representative of other parts of the State, and we take pleasure in giving some extended report of Washington's birthday as observed February 22d, in this city.

At a special meeting of the School Board, held on the evening of January 14, a petition was presented to the Directors signed by representatives of the American Mechanics, Juniors and Seniors, and the Sons of America, asking permission to place an American flag on the High School building and American flags in the study halls of all the school houses on Washington's birthday, "the anniversary of the birth of him who was 'first in war, first in peace and first in the hearts of his countrymen,' with the sole idea of inculcating into the minds and hearts of the youth of the present generation that love of America and her institutions which will bear fruit in the years to come; and to teach them to love, revere, admire, and, if need be, die in defense of those

principles of which that flag is the symbol." The petition was granted, and since then committees of the above-named organizations, with Mr. Wm. T. Wylie as chairman, have been busily at work making all the necessary arrangements for the presentation of the flags. It was decided that there should be a parade of the American Mechanics and Sons of America prior to the presentation, and at 1:30 o'clock, Captain Wm. D. Stauffer acting as chief marshal, the parade moved, reaching the Court House a few minutes before 3 o'clock, where an immense audience was assembled and where a chorus of 250 pupils of the High Schools, together with the High School orchestra, were in position ready for their share in the observance of the day. The following was the programme of exercises:

Prayer—Rev. M. Frayne.
Chorus—Our Flag O'er Us Waving (G. Verdi). Air—Anvil Chorus from "Il Trovatore"
Chorus—New Hail Columbia (F. Hopkinson, O. W. Holmes). Last three verses written for Centennial of adoption of Constitution of United States.
Chorus—Columbia, God Preserve Thee Free. Air—Austrian Hymn.
Presentation of Flag to High School.
Presentation Address—Rev. J. W. Meminger.
Response by City Supt. Buehrle.
Instrumental—Selections from "Il Trovatore" (G. Verdi), High School Orchestra.
Chorus—Rataplan, from "Daughter of Regiment" (G. Donizetti).
Chorus—The Scout, (F. Campana).
Presentation to other schools.
Presentation Address—Rev. J. R. T. Gray.
Response—Dr. M. W. Raub.
Instrumental—Selections from "Maritana" (W. V. Wallace), High School Orchestra.
Chorus—My Country, 'tis of Thee (S. F. Smith).
Chorus—Star Spangled Banner, (Francis Scott Key).
Recitations by pupils of High Schools.
Poem—To the American Flag (J. Rodman Drake), Ada M. Cochran.
Address—"The Immortal Memory of George Washington," Harry I. Evans Speech of the Irish Orator, Charles Phillips, made nearly seventy-five years ago, at a public dinner in Ireland, previous to proposing the above toast.
Chorus—Our Flag is There (written by an officer of the War of 1812).
Chorus—Columbia, the Gem of the Ocean (D. T. Shaw).
Doxology—Praise God from Whom All Blessings Flow.

The vocal music was under the direction of Prof. Carl Matz, instructor of music in the high schools, the orchestra under Prof. Thorbahn. The large four-page programme showed the flag printed in colors, gave the words of all the songs in generous type, and on its fourth page a fine picture of Washington, with *fac simile* of his autograph, and beneath it the following extract from an address by President Wm. Henry Harrison, grandfather of our newly-inaugurated President Harrison:

Hard, hard indeed, was the contest for freedom and the struggle for independence. The golden sun of liberty had well-nigh set in the gloom of an eternal night, ere its radiant beams illumined our western horizon. Had not the tutelar saint of Columbia hovered about the American camp, and presided over her destinies, Freedom must soon have met an untimely grave. Never can we sufficiently admire the wisdom of those statesmen, and the skill and bravery of those unconquerable veterans, who, by their unwearied exertions in the cabinet and in the field, achieved for us the glorious Revolution. Never can we duly appreciate the merits of a Washington, who, with but a handful of undisciplined yeomanry, triumphed over a royal army, and prostrated the Lion of England at the feet of the American Eagle. His name, so terrible to his foes, so welcome to his friends, shall live forever upon the brightest page of the historian, and be remembered with the warmest emotions of gratitude and pleasure, by those whom he has contributed to make happy, and by all mankind, when kings and princes and nobles for ages shall have sunk into their merited oblivion. Unlike them, he needs not the assistance of the sculptor or the architect to perpetuate his memory. He needs no princely dome, no monumental pile, no stately pyramid, whose towering height shall pierce the stormy clouds, and rear its lofty head to Heaven to tell posterity his fame. His deeds, his worthy deeds, alone have rendered him immortal!

Rev. J. W. Meminger, in presenting the flag to the High School, spoke substantially as follows:

On behalf of the organizations assembled here, I present to our highly esteemed Board of School Directors our country's flag. This flag is presented under the inspiration of the highest motives of education and patriotism, represents the toil and struggle and sacrifice, all that is highest, holiest and most sacred in our national life. It is the ensign of liberty throughout the world. To appreciate our flag we must appreciate our liberty, to appreciate our liberty we must know what it is and what it cost.

Liberty about which men dream, for which they have struggled and died, was not born in Faneuil Hall, nor at Bunker Hill, nor Yorktown; it lies deep in the human soul; is immortal and eternal as God. Why then have we not had it through all the ages? I answer, because men did not seem to know that liberty and law are allied forces; that the more perfectly we observe law the more perfect our liberty will be. What philosopher gave the world the thought that these forces are allied? The one who said: "Ye shall know the truth, and the truth shall make you free." Standing on the height of the centuries and looking through all the universe of God, I see it is the use and mastery of things that makes men free: that gives them liberty, power over earth, air, sea, over the elements, over human weakness and passion, that enables them to stand forth a little lower than the angels crowned with glory and honor. For this liberty let every faculty be developed; let every power of the soul be energized and quickened; let all the powers of the harmoniously-acting man stand forth in perfect freedom.

For this growth in knowledge, in strength, in liberty, we have our public schools. They are the very fountains of intelligence, at which

millions of our children may drink the waters of a higher, broader life, They are the safeguards of the nation's life. They are the gardens in which is growing to-day a fruitage more rich and rare than any the world has known. How fitting and proper, then, that the schools which give us physical, intellectual and spiritual liberty should have our star spangled banner, the ensign of national liberty, unfurled to the breeze. Men did not have national liberty—our flag was not possible—in the past, because Greece and Rome and the nationalities of the olden time believed that liberty was something held in trust by thrones, by empires, by families, and could be meted out or recalled at will. The brotherhood of man was not dreamed of till the Galilean came to declare it. He gave us the idea of democracy, of republicanism. He set a new force to work against Cæsarism. He told the children of Abraham, the Roman, the Greek, that before God and inhuman government all men are equal, and for living and teaching that great thought he died on Calvary, but his cross became the centre of a new civilization. The New Testament is the text-book of human liberty. . . .

But this is Washington's birthday, and there is no marble white enough on which to carve the name of the Father of his country. Let us see how much of it is traced upon our hearts; let us see if the idea of liberty set forth by the Galilean and the thought of the brotherhood of man found a place in his life. We need but see that he not only declined a kingdom but founded a republic. He believed in self government. If I coutd strike to-day one golden chord that would sound the beauty and power of Washington's life, it would be an eye for duty within and opportunity without.

I want our Bible, our schools, our flag to teach this thought, to fill every child in America with a great vision of the sublime reach and possibility within the soul; of sublime possibility that dwells in the great world of material opportunity: of thought and life that lie like an ever-surging sea about our onward way. "The Virginia boy heard the sound of the distant cataract, and thought of far-off rivers, fertile vales, lofty mountains, dense forests; but back of that and beyond he saw another America, rich in everything that God has given to man—her rivers, bearers of commerce; her mountains, stored with gold and silver, coal and iron; noble cities, splendid capitals, magnificent homes; and, back of that, social joys, love and life, happiness and peace—all men free, one man's vote as good as another; all men equal—over all waving the star-spangled banner. This vision was the inspiration of his life. Let us realize his sense of duty, of loyalty; let us find love of knowledge and truth, love of virtue, love of country, love of God, to be the inspiration of life. This flag represents the idea, the principle, that runs through all.

In accepting the flag Dr. R. K. Buehrle, Superintendent of the schools of the city, spoke of the importance of the lessons it must inculcate, and pledged himself, as its custodian, that it should be displayed on all days proper for national observance. The flag will float nearly one hundred feet above the office of the Superintendent, and will be run up, upon his order, by the janitor of the High School building.

Rev. Mr. Gray, in presenting the flags to the Board of Directors for the other schools, spoke much as follows:

Never did I undertake a task, lying outside my ministerial work, more thoroughly in harmony with my own feelings and principles, than the one which I now perform. I do not know whose brain conceived the idea of placing the emblem of our nationality over and within our public school buildings, but to me that idea was a patriotic inspiration.

This is distinctively the age of object-teaching. Our ablest educators believe that one of the best methods of imparting instruction to children is by placing before their eyes, if possible, the object about which instruction is given. If the object itself cannot be shown, then the next best thing is a model of that object, or at least a picture of it. In our well-equipped school-rooms are models of geometric forms, globes, collections of plants and minerals, raised maps, charts and pictures. The ceremonies of this day are in harmony with the educational theory of our time. This is simply the application of an accepted principle to the education of our children in patriotism. The flag, waving its proud folds over our High School building, and occupying an honored place in all the study halls, will unite in the minds of the children, education in patriotism with education in all branches of knowledge. And, in my opinion, he or she will be a wise teacher who will make the flag of our country the object of many a lesson which will fill the children's hearts with devotion to their country, and make them appreciate the principles of liberty under law, equality before God and man, and fraternity between North, South, East and West, which that flag symbolizes.

We cannot teach religion in our public schools, because we have no State church; but I believe the Bible ought to be there, because, no matter what our creed may be, we all believe in the Book. And so I believe that the flag should be there; for while we honestly differ on political questions, to every patriot the flag is the emblem of his country, and under it all parties unite in loyalty and devotion. Every American, whether a citizen by birth or adoption, is certainly willing that his children shall be taught to reverence the flag and to stand by it in time of peril.

There come to me to-day recollections of an impressive scene which I witnessed in 1861. The students of the Philadelphia High School erected a lofty flag-staff upon the building, purchased a costly flag, and threw it to the breeze amid ceremonies very similar to those of this occasion. Many of the students, who participated in those ceremonies, followed the flag on weary marches and on bloody fields, or fought

beneath its folds on ships of war along our coast, or on our mighty rivers. Then all was excitement and anxiety; but how nobly men of all parties rallied round the flag. That object-lesson, in its influence upon the young men, was worth a thousand orations. How different the circumstances under which we gather on this the anniversary of the birth of the "Father of his country." May God grant that none of these boys and young men may ever be called upon to "rally round the flag," pledging their lives, their fortunes, and their sacred honor in its defence; but, should the flag ever be assailed, at home or abroad, may their love of their country be like his who wrote the immortal order, "If any man attempts to haul down the American flag, shoot him on the spot."

The flags were received in a brief but forcible reply by Dr. M. W. Raub, an active member of the Board of School Directors, who assured the great audience that, to the utmost of his power, the teaching of the lesson of patriotism should be encouraged through the aid of the flags, and in all other ways possible in the schools.

We give space also, as matter of much interest in this connection, the speech of Hon. Charles Phillips, the famous Irish orator of three-quarters of a century ago (recited by Master Evans), on the occasion of a public dinner in Ireland:

The mention of America has never failed to fill me with the most lively emotions. In my earliest infancy, that tender season when impressions, at once the most permanent and the most powerful, are likely to be made, the story of her then recent struggle raised a throb in every heart that loved liberty, and wrung a reluctant tribute even from discomfited oppression. I saw her spurning the luxuries that would enervate, and the legions that would intimidate; dashing from her lips the poisoned cup of European servitude, and through all the vicissitudes of her protracted conflict, displaying a magnanimity that defied misfortune, and a moderation that gave new grace to victory. It was the first vision of my childhood; it will descend with me to the grave.

Who can deny that the existence of such a country presents a subject for human congratulation! Who can deny that its gigantic advancement offers a field for the most rational conjecture! Who shall say that when, in its follies or its crimes, the Old World may have interred all the pride of its power, and all the pomp of its civilization, human nature may not find its destined renovation in the New! For myself, I have no doubt of it. I have not the least doubt that when our temples and our trophies shall have mouldered in the dust, and when the glories of our name shall be but the legend of tradition, philosophy will rise again in the sky of her Franklin, and glory rekindle at the urn of her Washington.

Is this the vision of a romantic fancy? Is it even improbable? Is it half so improbable as the events which for the last twenty years have rolled like successive tides over the surface of the European world, each erasing the impressions that preceded it? Thousands upon thousands I know there are, who will consider this supposition as wild and whimsical, but they have dwelt with little reflection upon the records of the past. They have but ill observed the never-ceasing progress of national rise, and national ruin. They form their judgment on the deceitful stability of the present hour, never considering the innumerable monarchies and republics in former days, apparently as permanent, whose very existence is now become a subject of speculation, I had almost said of skepticism.

I appeal to History. Tell me, thou reverend chronicler of the grave, can ambition, wealth, commerce, or heroism, secure to an empire the permanency of its possessions? Alas! Troy thought so once, yet the land of Priam lives only in song! Thebes thought so once, yet her hundred gates have crumbled, and her monuments are as the dust which they were vainly made to commemorate! So thought Palmyra; but where is she? So thought the countries of Demosthenes and Leonidas, yet Sparta is trampled by the timid slave, and Athens is insulted by the servile Ottoman. The days of their glory are as if they never had been; and the island which was then a speck, rude and neglected in the barren ocean, now rivals the ubiquity of their commerce, the glory of their arms, the force of their philosophy, the eloquence of their senate, and the inspiration of their bards!

Who shall say then, contemplating the past, that England, proud and powerful as she appears, may not one day be what Athens *is*, and the young America yet soar to be what Athens *was!* Who shall say, that when the European column shall have mouldered, and the night of barbarism obscured its very ruins, *that* mighty continent may not emerge from the horizon to rule for its time sovereign of the ascendant!

Such, sir, is the natural progress of human operations, and such, the unsubstantial mockery of human pride. But I should, perhaps, apologize for this digression. The tombs are at best a sad, although instructive subject. At all events, they are ill suited to such an hour as this. I shall endeavor to atone for it, by turning to a theme which the tombs cannot inurn, or revolutions alter.

It is the custom of your board, and a noble one it is, to deck the cup of the gay with the garland of the great. Allow me to add one flower to the chaplet, which, though it sprung in a foreign soil, is not exotic; virtue planted it, and it is naturalized everywhere.

I see you concur with me that it matters very little what immediate spot may be the birthplace of such a man as Washington. No people can claim, no country can appropriate him. The boon of Providence to the human race, his fame is eternity, and his residence creation. Though it was the defeat of our arms, and the disgrace of our policy, I almost bless the convulsion in which he had his

origin. In the production of Washington, it does really appear as if nature was endeavoring to improve upon herself, and that all the virtues of the ancient world were but so many studies preparatory to the patriot of the new. Individual instances no doubt there were, splendid examples of some single qualification. Cæsar was merciful, Scipio was continent, Hannibal was patient; but it was reserved for Washington to blend them all in one, and like the lovely masterpiece of the Grecian artist, to exhibit in one glow of associated beauty, the pride of every model, and the perfection of every master. As a general, he marshalled the peasant into a veteran, and supplied by discipline the absence of experience. As a statesman he enlarged the policy of the cabinet into the most comprehensive system of general advantage; and such was the wisdom of his views, and the philosophy of his counsels, that to the general and the statesman, he almost added the character of the sage. A conqueror, he was untainted with the crime of blood; a revolutionist, he was free from any stain of treason, for aggression commenced the contest, and his country called him to the command. Liberty unsheathed his sword, necessity stained, victory returned it.

If he had paused here, History might have doubted what station to assign him, whether at the head of her citizens or soldiers, her heroes or her patriots. But the last glorious act crowns his career, and banishes all hesitation. Who, like Washington, after having emancipated a hemisphere, declined its crown, and preferred the retirement of domestic life to the adoration of a land he might be almost said to have created!

> How shall we rank thee upon glory's page,
> Thou more than soldier, and just less than sage?
> All thou hast been reflects less fame on thee,
> Far less, than all thou hast forborne to be.

Such, sir, is the testimony of one not to be accused of partiality in his estimate of America. Happy, proud America! The lightnings of heaven yielded to your philosophy! The temptations of earth could not seduce your patriotism! I have the honor, sir, of proposing to you as a toast,—"The immortal memory of George Washington."

The exercises throughout were thoroughly enjoyed by everybody. At the conclusion of the programme the parade was re-formed and moved out to the High School building. Here the flag was finally raised to its place over the tower, where it can be seen from all parts of the city. It will be an educating influence to the entire community. For when the "High School flag" goes up, not only will the boys and girls with their teachers in all the schools, but men and women by hundreds and thousands throughout the city, comment upon or inquire after the occasion of its display.

It was a good thing to do. We heartily thank the patriotic men who have done it, and trust the good work may go forward through societies, and through Boards of Directors, whenever opportunity offers, until the flag shall tell its story on all proper occasions everywhere, not only throughout the Commonwealth of Pennsylvania, but throughout the entire Nation.

COURSE OF READING IN MUSIC.

THE literature of music claims its share of attention, and the course of reading proposed by the *Musical Herald*, as presented in the following communication from Prof. Geo. C. Young, of the State Normal School at Kutztown, commends itself to the consideration of all persons interested in "the divine art." Prof. Young is a devoted lover of music, and a competent and successful teacher of this branch of study and practice. He is very favorably known also, in many of our eastern counties, where, for a number of years, he has conducted the music at the annual sessions of their county institutes. Whatever he sees fit to endorse we accept as good. He says:

Messrs. Editors: Knowing your earnest and constant efforts in behalf of musical culture, and having for years desired to see a greater growth in the intellectual attainments of both the amateur and professional musician, I beg a little space in your valuable *Journal* in order to call the attention of your readers to a project recently inaugurated by the editorial staff of the *Boston Musical Herald*.

This project is a three years' Musical Reading Course. Its aim is to awaken an interest in the study of music in all its bearings, and will therefore include in its scope Musical Literature, Biography, History, Art, and Science, all of which will prove not only entertaining but instructive, and will become a very desirable acquisition to every one who has aught to do with, and is thoroughly interested in, the development of the art universal.

The course will not be expensive, requiring simply a subscription to the *Boston Musical Herald*, which costs but one dollar per year, and a small outlay for the necessary books. None of the books will include any mathematical works or foreign languages, living or dead. Forty minutes daily will be sufficient to complete one year's reading with perfect ease. Towards the end of the year registered members will receive a set of questions upon the year's work. These questions, which are to be answered as far as possible from memory, will be carefully examined, filed and credit given, and upon the completion of the course, a certificate will be granted. The certificate, which will be signed by the editorial staff of *The Herald*, will very materially aid all who wish to enlarge their sphere of usefulness, and to extend their influence beyond their present lines of work.

The advantages of such a course of reading and study are so apparent, Mr. Editor, that I need not dwell upon any of them. I shall simply trust that this brief reference to a most praiseworthy object will be sufficient to interest some among your readers in its behalf, feeling assured that they will reap a rich harvest of culture and influence hitherto unknown.

OFFICIAL DEPARTMENT.

NEW STATE NORMAL SCHOOL.

DEPARTMENT OF PUBLIC INSTRUCTION,
HARRISBURG, February 4, 1889.

IN compliance with an Act of Assembly requiring public notice to be given concerning the establishment of State Normal Schools, I do hereby give notice that the Normal school located at Centreville, Butler county, having been duly inspected by a Committee, appointed for the purpose, is officially recognized upon the recommendation of said Committee, as a State Normal School, for the Eleventh District, composed of the counties of Allegheny, Beaver and Butler.

E. E. HIGBEE,
Supt. Pub. Instruction.

OFFICIAL REPORT OF INSPECTORS.

TO DR. E. E. HIGBEE, *Superintendent of Public Instruction:* The undersigned Inspectors appointed by you, with the consent of the Governor, in pursuance of the requirements of the Seventh Section of the "Act to provide for the training of teachers for the Common Schools of the State," approved the 20th day of May, 1857, together with the Superintendents of the counties of Allegheny, Beaver and Butler, and also the City and Borough Superintendents within the District, *ex-officio* members of the Committee, whose names are last subscribed, do report:

That on due notice received from the Department of Public Instruction, they did personally, and at the same time, to wit: On February the 1st, 1889, visit and carefully inspect the proposed Normal School located at Centreville, Butler county, Pa., and after a thorough examination thereof, of its general arrangement and facilities for instruction, we do approve the same and find that they come fully up to the provisions of the "Act to provide for the due training of teachers for the Common Schools of the State," approved the 20th day of May, one thousand eight hundred and fifty-seven, and its supplements.

We, therefore, certify the same to the Department of Public Instruction, with our opinion that the proposed Normal School at Centreville has fully complied with the provisions of the said Act and its supplements, as far as can be done before going into operation under the same, and we unanimously recommend that it shall forthwith be recognized as a State Normal School for the Eleventh Normal School District of Pennsylvania, composed of the counties of Allegheny, Beaver and Butler.

S. M. JACKSON, Apollo, Armstrong Co.,
SAMUEL H. MILLER, Mercer, Mercer Co.,
SILAS J. MARLIN, Brookville, Jefferson Co.,
WILLIAM MCNAIR, Oil City, Venango Co.,
SAMUEL HAMILTON, Supt. Allegheny Co.,
J. M. REED, Supt. Beaver Co.,
J. L. SNYDER, Supt. Butler Co.,
JOHN MORROW, Supt. Allegheny City,
EBENEZER MACKEY, Borough Supt. Butler, Butler Co.,
M. L. KNIGHT, Borough Supt. Beaver Falls, Beaver Co., Pa.,
CHAS. W. DEAN, Borough Supt. McKeesport, Allegheny Co.,
JOHN COLLIER, Supt. of Mifflin Twp., Allegheny Co.

PROCEEDINGS OF THE COMMITTEE.

CENTREVILLE, PA., *Feb.* 1, 1889.

Committee met at hotel in Centreville, at 10 a. m. Members present: Hon. Samuel H. Miller, of Mercer; Hon. Wm. McNair, of Oil City; Col. S. J. Marlin, of Brookville, and Col. S. M. Jackson, of Apollo. Superintendents present: John Morrow, of Allegheny City; Chas. W. Dean, McKeesport; J. M. Reed, Beaver county; J. L. Snyder, Butler Borough, Butler county; E. Mackey, Butler; John Collier, Mifflin township; Martin L. Knight, Beaver Falls, and Samuel Hamilton, Allegheny county; also, State Supt. Higbee.

The Committee organized by electing Hon. Samuel H. Miller, of Mercer, President, and Supt. Samuel Hamilton, of Allegheny county, Secretary. A Committee consisting of Hon. Samuel Miller, Hon. Wm. McNair, and Col. S. J. Marlin, was appointed to examine the title of the property, and to see that it was good, and to learn whether the debt on the property was less than one-third its entire cost. This Committee reported favorably on both points named, and after a thorough inspection of

the institution, it was unanimously agreed by the Committee that the law had been fully complied with. The following resolution was adopted:

Resolved, That, in view of what has been accomplished, the Committe of Examination cannot but congratulate the trustees and citizens of the Eleventh Normal School District, and especially of Centreville and vicinity, upon their noble and generous work in erecting buildings so well adapted for the instruction of the teachers of the Commonwealth, so beautifully situated, and so conveniently arranged. And, further, they would take this opportunity of expressing their most hearty thanks for the generous hospitality offered this day to the Committee and visitors.

SUPERINTENDENTS COMMISSIONED.

MR. CLARENCE B. MILLER was commissioned January 3, 1889, to be Superintendent of the Borough of Nanticoke, Luzerne county, *vice* Supt. Will S. Monroe, resigned.

MR. THOMAS FARQUHAR was commissioned January 10, 1889, to be Superintendent of the Borough of Bethlehem, Northampton county, *vice* Supt. G. H. Desh, deceased.

ITEMS FROM REPORTS.

ALLEGHENY.—Supt. Hamilton: New schoolhouses have been built in Jefferson, in Scott, and in Upper St. Clair townships. A large local institute was held in Braddock, January 19. About 200 teachers were present, and many directors from adjoining districts.

BEAVER.—Supt Reed: The county institute was well attended, and, in the judgment of many, was the best we have had. Taking the whole county into consideration, I am better pleased with the work this year than at any other time.

BERKS.—Supt. Keck: One of the Jefferson school-houses was blown down by the storm on January 9th. The Board rented a room in a private house for temporary use, Brecknock refurnished one room with patent furniture. Institutes were held at Millersburg, Klinesville, Sinking Spring and Lyons. At no place was the hall large enough to accommodate the people. At Lyons 83 teachers were enrolled. Earl, Richmond, Tilden, and Cumru, each enlarged one school-yard. The Cumru Board visits each of its schools every month, and a written report of each school is placed before the teachers at the monthly meeting. It is a new plan for the district, but has already brought about good results. Hereford, Earl, Richmond, Albany, and Maxatawny, each built a new school-house. They are all first-class, and all but one properly furnished. Those in Richmond and Albany have the natural slate surface.

BLAIR.—Supt. Likens: The public school building of Tyrone stands on a lot in the centre of the town. It is 143 feet long, 100 feet wide, and 48 feet high. It has 2½ stories, containing 17 large school-rooms, one lyceum hall, and one office. It is furnished with the latest patent desks and slate blackboards. There is water in each room, and gas in three. There are eight Smead heating furnaces, including the dry earth closet, in the cellar. The architect and contractor was Geo. C. Davison, of West Tyrone. An iron fence encloses the grounds. The school property is valued at $4000.

CAMBRIA.—Supt. Leech: Since the County Institute the teachers have been very active in holding District Institutes with good practical results. Very successful meetings have been held at Coopersdale, Wilmore, East Conemaugh, Mountain Dale, Belsano, and St. Augustine, and the programmes are published for a number of others in the near future. The parents are aroused. Many good effects of our very successful County Institute are visible wherever we go. The enthusiasm which it awakened is very remarkable, and Cambria moves upward.

CAMERON.—Supt. Pearsall: Four local institutes were held, all of which were well attended and did much to arouse an educational interest in the respective districts. The Sterling schools held an entertainment and raised about $22, which will be used to start a school library.

CARBON.—Supt. Snyder: In point of interest, attendance, and instruction, the annual County Institute was the best ever held in the county. The large opera house was packed at every session, and the citizens as well as the teachers manifested the greatest interest in the exercises. The institute was divided into classes during several of the morning sessions, and thorough work was done by the instructors in that way. The institute was largely attended by directors on Thursday, and during the evening sessions. Undoubtedly much good will result from the meeting.

CHESTER.—Supt. Walton: Tredyffrin, Easttown and E. Goshen townships, each have a term of nine months and pay $40 and $50 per month. In East Goshen all the schools have been supplied with ample slate black-board surface. The school boards in all these townships are awake to the hygienic value of tight, warm school-room floors. At Goshenville the old floor was covered with heavy felt paper, and a new floor laid upon it. In Tredyffrin one school has a double floor with cement lining between. At Berwyn, Smead's hot-air furnace is in use with satisfactory results. The remarkable attendance at the Atglen Local Institute, reveals a growing public interest in our common schools. The instruction given there was of practical value to our teachers.

CLINTON.—Supt. Brungard: Local Institutes were held at Ruchtown, Beech Creek, Tylersville, and Clintondale. About one-fourth of the teachers of the county were present at these meetings, and took an active part in the exercises. They were also well attended by the directors. Our people everywhere are showing an increased interest in the matter of school work. Teachers, with few exceptions, are laboring intelligently and coöperating with Direc-

tors and Superintendent in placing our schools on a higher plane. The attendance at school seems to be improving.

DAUPHIN.—Supt. McNeal: During the month of January I attended Local Institutes at Elizabethville, Derry Church and Wiconisco. They were all very interesting and practical. The largest was the one at Wiconisco. About forty teachers were present, and on Friday evening the house was crowded with the citizens of the district. Prof. J. F. Barton, of the Shippensburg Normal School, delivered an address on Friday evening, and assisted in the work on Saturday. The incorporation of Williamstown borough left Williams township with six schools and only two single-room buildings. During the early part of the term they occupied rented rooms, but a few weeks ago they completed a single-room frame and a four-room brick building which they now occupy. The latter is an excellent building with large comfortable rooms, supplied with excellent furniture and good slate black-boards. The Middletown Board has just furnished a wing to the high school building. It contains four fine rooms and is provided with the Smead-Rutan system of heating and ventilating.

DELAWARE.—Supt. Smith: The Ridley Township Board has built a fine school-house at Prospect Park. It contains four rooms and is built and finished throughout according to the most modern designs. The district has been obliged to open four new schools in the last five months on account of increased population, and because two boroughs have been organized within its borders. Birmingham borough dedicated a new building January 2d. It is one of the finest in the rural districts. The citizens turned out and filled the house to its utmost capacity to listen to the programme of exercises in which pupils, directors and patrons took part. The Delaware County Teachers' Association held a meeting in Ridley Park, January 26th. Over 100 persons were present. The meetings are rapidly growing in popularity and interest.

ERIE.—Supt. Morrison: The item of most importance just now is the interest in Local Institutes. There are more of these Institutes being held this winter, and more teachers attending them, than ever before in the history of such meetings in this county.

FAYETTE.—Supt. Herrington: I visited the Bridgeport borough schools and saw for the first time the improvements made in and around the school building. At an expense of $800 the building has been painted inside and outside, replastered, fences and walks put in good condition; in short, an apparently new building made of the old one. Other directors would do well to follow the example of the Bridgeport Board.

FOREST.—Supt. Kerr: On the first Monday in January school was opened in the new building in Marienville, Jenks district. It is a very fine building, having two of the best rooms in the county. The directors of Jenks district deserve credit not only for having the best buildings in the county, but also for paying the best wages for teachers. My health has so far improved that I am again able to resume my school visitations.

FULTON.—Supt. Peck: At no time in the past has there been such general interest in the common schools. Meetings are still being held in the different districts, and teachers, directors and patrons come together to discuss ways and means for the advancement of school interests.

INDIANA.—Supt. Cochran: During the early part of the school term the roads throughout the county were almost impassable. This, to a certain extent, prevented our teachers from taking their usual interest in Local Institute work. Since the holidays, however, the roads have improved and the Institutes are well attended. The work done at the County Institute is being thoroughly discussed. The way some of our teachers handle these topics shows that they were attentive and appreciative listeners. We think that we never had a more interesting Institute, nor one that produced better results than our last County Institute. The schools, so far as as we have visited them, are doing good work, better as a whole than in any previous year.

JEFFERSON.—Supt. Hughes: Local Institutes and educational meetings are being held in different parts of the county. Our teachers, directors and citizens in general, take a marked interest in these meetings.

LACKAWANNA.—Supt. Davis: A successful local institute was held at Waverly. Various educational topics were discussed. An entertainment for the benefit of the school library was given in the evening. The entertainment was excellent and a fund of $28 was realized.

LUZERNE.—Supt. Coughlin: Our County Institute was attended by 646 teachers, and a large number of spectators, It is quite a common saying, "The last institute was the best ever held," but in our case it is certainly true. All the additional expense over former institutes was put on the day sessions, the effect of which was to give us a programme in character and strength seldom excelled. The leading topics were Vocal Music, Industrial Training, and Objective Drawing.

LYCOMING.—Sup. Lose: Six local institutes were held during January, all of which drew immense crowds. The day sessions were devoted to the pupils; class-drills, singing, recitations and declamations, instruction by leading teachers of the county, discussion of methods, and the display and examination of specimen work done by the children, made up the programme. The evening sessions were devoted to the reading of papers by the teachers of the district and the discussion of the same, and to the consideration of the more general educational topics.

MIFFLIN.—Supt Myers: We have started several school libraries in the country districts and more will be organized as fast as time will permit. We have had the second County Convention of School Directors. More than half the directors were present. These meetings have been productive of much good. Our directors are alive to the needs of the schools. It is only a matter of a few years, and our schools will have free text-books and general supplies, and then they will be "free schools" indeed.

MONTGOMERY.—Supt. Hoffecker: Local institutes were held at Pennsburg and at Sumneytown. The attendance, interest and enthusiasm at Sumneytown surpassed, in these particulars, the county institutes of twenty-five years ago. The schools visited were well attended and in good working order. Many teachers are taking active steps to establish school libraries, and are receiving the hearty support of the people.

NORTHAMPTON.—Supt. Werner: The majority of the seventy-six schools I visited during the month are doing first-class work. We held three Local Institutes in January, two of them joint meetings, one at South Bethlehem, where Supt. Knauss, of Lehigh, and a large number of his teachers, joined us at the headquarters of Supt. Wilt in the Excelsior building; the other at Slatington, where Carbon and Northamption counties joined Lehigh. Pen Argyl had the last Local Institute for this month. The three were a grand success.

NORTHUMBERLAND.—Supt. Bloom: I devoted every school day of this month to the visitation of schools. The increased manifestation of interest in the public schools by patrons, teachers and directors is very encouraging. The substantial character of this interest will be noticed from the following: Excellent wall maps placed in the schools of Upper Augusta, Shamokin and Jackson townships, two houses repaired, neatly painted, etc., in Jordan, together with the adoption of new books. I attended a Local Institute at Georgetown. The exercises were of an interesting character, appreciated by the people, and will, I trust, be productive of much good.

PERRY.—Supt. Aumiller: A good frame house has been erected in Tyrone, and two of the same kind in Centre. Each of these buildings is supplied with patent furniture and a sufficient amount of black-board surface; ample playgrounds have also been provided. Local Institutes were held at Landisburg, Ickesburg and Millerstown. They were all well attended by teachers, directors and citizens. Live educational topics were earnestly discussed in each of them. These meetings constitute one of the strongest educational factors, and I take much pleasure in noting their development during the last six years.

POTTER.—Supt. Kies: Local Institutes were held at Costello and Ayers' Hill. The teachers did commendable work at each, and a goodly number of citizens attended. Oswayo and Clara townships have placed physiological charts in all of their schools, and Sweden, maps and charts. Summit has completed the best rural school-house in the county, which reflects credit upon the directors in charge. Our schools, on an average, are in a prosperous condition this winter: most of the teachers are improving in methods.

SNYDER.—Supt. Herman: The County Reading Circle held its first regular meeting at Middleburg. Spencer's "What knowledge is of the most worth?" was discussed. The meeting was interesting and enthusiastic. The teachers of the west end of the county held a very successful meeting at Adamsburg at the same time. I attended an enthusiastic educational meeting at the Hiester Valley school in Perry township. The schools with but few exceptions are doing well. Nearly every township has one or more literary societies. Selinsgrove, Middleburg and Freeburg have increased their school libraries.

SULLIVAN.—Supt. Black: Our schools are all doing well, with but few exceptions. One new building was completed in December. Elkland, Forks, Davidson, and La Porte townships have procured some very valuable apparatus, such as physiological charts, wall maps, and dictionaries. On the whole I can see a marked improvement in interest, on the part of the teachers, directors, and people, in the work of the schools.

VENANGO.—Supt. Lord: During January we held three of the local institutes appointed at our County Institute, viz., at Dempseytown, Clintonville, and Emlenton. All were well attended by the teachers of the respective localities, and the afternoon and evening sessions brought out large audiences of the citizens. I believe the Local Institute, properly managed, is one of the greatest factors for good in our educational work, and certainly our people seem to appreciate them very highly. With few exceptions, our schools are doing good work. Diphtheria and scarlet fever have made serious inroads upon the attendance in several sections of the county, and a few of our teachers have yet to learn that a disorderly school is of little benefit to the community.

WAYNE.—Supt. Kennedy: Local Institutes are held every three weeks by the teachers of Dreher, Lehigh, and Sterling townships. The work in the schools visited this month is in advance of that done in the same schools last year. Only one was visited that could in any sense be considered a failure. The new school-house at Ariel, in Lake township, is a fine one, an ornament to the village and a credit to the people of that community. The teachers of Honesdale, and of Hawley, also hold regular district institutes.

BETHLEHEM.—Supt. Farquhar: Having been commissioned only on January 10th, as the successor of the late Mr. Geo. H. Desh, this is my first monthly report. I contemplate no interference with the plans laid down by Mr. Desh for this term. I have spent the month in visiting the schools, and find them in good condition. The graduates of the high school and all the teachers employed in the schools honored the memory of the late Superintendent by passing series of fitting resolutions. While not personally acquainted with him, I have reason to believe him an earnest Christian instructor who strove to do his best at all times. He succeeded in a good degree in impressing his ideas and methods upon these schools.

CHESTER.—Supt. Foster: We have during the past month opened a new school building in the second ward. It contains eight rooms, four of which are at present occupied. The number of teachers in the city is thus increased to sixty-three.

CORRY.—Supt. Colegrove: At the close of the

fall term Miss G. M. Kent, for eighteen years principal of our high school, resigned her position. The vacancy was filled by the election of Miss Dora Wells, a graduate of Wellesley college, and for three years principal of the high school of St. Peter, Minnesota.

DUNMORE.—Supt. Fowler: We have opened our new building for school purposes. The building is an addition to one that we erected two years ago, and includes two fine rooms well supplied with modern improvements.

NANTICOKE.—Supt. Monroe: A few cases of small pox, which broke out in our borough the last week in December, have interfered very much with the organization of our schools. The School Board adopted a resolution requiring every child to be vaccinated, or remain away from school. While this action is regarded with favor by the majority of our citizens, it has met with some opposition, and a poor attendance in some of the schools is the consequence.

POTTSTOWN.—Supt. Rupert: We have just introduced mechanical drawing as an optional study into our high school. The course in this school is four years, and pupils of the second and third year's classes are permitted to take up this subject. Prof J. K. Hurly, our newly elected principal, has charge of this department. Eight pupils have taken up the study, and we anticipate good results.

SCRANTON.—Supt. Phillips: A great loss has been sustained by this school district in the death of its very efficient secretary, Mr. Robert D. Schimpff. Courteous, affable, and prompt, he was ever ready to suggest a way that would secure effective service to the teacher. A man of scientific turn of mind, he, without a collegiate education, accomplished more in the realms of science than is usual even to those who are wholly engaged in scientific pursuits. His successor as secretary of the Board is Mr. Frank T. O'Kell.

S. BETHLEHEM.—Supt. Wilt: The School Board has taken initiatory steps toward providing for the better accommodation of the 1100 pupils now in attendance in the public schools. They will either build a new house, or put an annex of six rooms to the First Ward building.

YORK.—Supt. Shelley: The work of the year is steadily progressing. Our teachers are availing themselves of every opportunity for self-improvement. The local institute is well attended. The schools are deriving special advantage from "The Fountain" used in all as supplementary reading.

LITERARY DEPARTMENT.

WE have before now called attention to the dainty and well-nigh faultless style in which Messrs. G. P. Putnam's Sons, of New York, are publishing some of the favorite classics of all languages in their series of "Knickerbocker Nuggets." In giving us in this beautiful form Lockhart's *Ancient Spanish Ballads* (price, $1.50), with the translator's scholarly notes, they have conferred a special favor on students of literature. In the matter of bookmaking it would be hard to find anything more exquisite than the volumes of this series. In size and shape, binding, typography, press-work and paper, they are worthy to be accepted as the modern successors of the famed Elzevirs and Aldines of the past. They deserve the great favor with which they are received by book-lovers everywhere. Twenty volumes of these veritable "Nuggets" have thus far been issued.

A fourth volume has also recently been added to the excellent series of critical biographies of "Great French Writers" that is being published in handsome style by A. C. McClurg & Co., of Chicago (*not* by S. C. Griggs & Co. as inadvertently stated in our February issue). It is on *Montesquieu* (price $1.00), by Albert Sorel, and is translated from the French by M. B. and E. P. Anderson. It is an admirable piece of critical and biographical work, as able and fully as interesting of any of its predecessors in the series. We are given a graphic picture of the famous author of "The Spirit of the Laws," as man and as thinker, and a very fair and thoughtful critique of his chief works and of his standing in literature and his influence on the politics and philosophy of his own and other countries. The whole volume is intensely interesting; it hardly could be anything, else treating of the times and of the man it does. It throws much light on the inner springs and sources of French history since Montesquieu's time and before; and altogether is one of the most thorough and satisfactory biographical and historical studies we have ever read. It adds greatly to the value of an already invaluable series of books.

A third series of books that have from time to time been noticed here is the new *Riverside Edition of Whittier's Works*, published by Houghton, Mifflin & Co., Boston. (Price, $1.50 per vol.) We referred last month to the completion of the "Poetical Works" in four volumes. Since then the "Prose Works" have also been completed. Mr. Whittier's poetry is so universally known and loved that the attention of many has thereby been diverted from his numerous prose writings, and some will be surprised at the quantity, variety, and excellence of these as contained in these three handsome volumes of his Works. The first volume contains "Margaret Smith's Journal in the Province of Massachusetts Bay, 1678–9," and eighteen "Tales and Sketches." It has as frontispiece a beautiful etched portrait of the poet made by S. A. Schoff, in 1885. The second volume gives us "Old Portraits and Modern Sketches," "Personal Sketches and Tributes," and "Historical Papers." It is in these sketches of kindred spirits and personal friends of the poet, that we learn to know his strong yet altogether sweet and lovely nature, probably better than from

any other source. In the last volume we have him presented to us as the zealous abolitionist in the papers on "The Conflict with Slavery;" as the righteous reformer of politics and society, in those on "Reform and Politics;" and as the religious and literary thinker and critic, in those on "The Inner Life" and "Criticism." This work in prose is as characteristic, and of as great practical importance, as his poetry; it is fully as much a part of his life-work. The books are fine specimens of the best work of the Riverside Press. From the same press also has just come in book form "Charles Egbert Craddock's" latest novel, *The Despot of Broomsedge Cove*, (Price, $1.25,) that was so prominent a feature of the *Atlantic Monthly* all last year. It is located in the picturesque Tennessee mountains, as are all of this popular novelist's tales; and yet it is as novel, fresh, and original as though it were the first one of its kind. Artistically it is fully up to the best she has ever written, perhaps even better than what was heretofore her masterpiece, "In the Clouds." It certainly secures only more firmly her well-earned position in the very foremost rank of American novelists. New writers are constantly appearing, some even from the "far West," like, for example, Mary R. Baldwin, who has just published, through John B. Alden, New York, a modest little volume, *Maurice Rossman's Leading*, which is full of promise. It is a novel full of interest, pictures very faithfully some of the leading features of life in a raw mining town, and is animated by a pure and lofty motive and spirit. We shall be disappointed if its author does not make for herself a recognized place in the rank of "western writers."

In *The Woman's Story* (New York: John B. Alden, price, $1), Laura C. Holloway has made the unique attempt to give us in literature what the composite photograph does for us in art. Collected into a stout volume we have sketches, stories, etc., by twenty of the leading female writers in the country, "from the appearance of the first great American novel to the present day." What makes the volume of unusual interest is the fact that each one of the selections was chosen by its author herself and pronounced by her to be her best sketch work. To each selection is prefixed a portrait and brief biographical sketch of its writer. The volume is a thoroughly representative one, and gives a very good view of the female element and characteristics in our literature.

A writer who can, in about 350 pages, take his reader across the American continent, the Sandwich Islands, through Japan, China, Ceylon, Australia, New Zealand, India, Egypt, thence to Spain, France, Italy, and various parts of Europe, and can do it in an entertaining manner, is certainly entitled to a good deal of credit as a skilful traveller and writer. This is what Mr. Maturin M. Ballou has done in his latest volume, *Foot-Prints of Travel;* or Journeyings in Many Lands (Boston: Ginn & Co., price, $1.10). The author has used in making this volume some of the material of his former popular books of travel, "Due West," "Due South," "Due North," and others, while he has also added much original matter. The book is specially adapted for young folks, is well illustrated, full of information, and just the kind of volume that ought to be found on the shelves of school libraries.

We have several times had occasion, in the past, to commend to our readers the unusual importance and excellence of Messrs. D. Appleton & Co.'s "International Educational Series" as a set of books of the highest value to teachers. The series is ably edited by Dr. W. T. Harris. The eighth volume is by David Kay, F. R. G. S., on *Memory:* What it Is, and How to Improve it ($1.50), which certainly is a subject of profound interest to every one. Unlike most works treating of memory, it is a thoroughly scientific and philosophic work, entering first upon a full and exhaustive examination of what memory is and what are the laws governing its operations, and then giving clear and practical instruction for the proper training and improvement of this important faculty. A careful study of the work cannot but be of immediate and great benefit to every educator. And the same is equally true of the latest, the ninth, volume of this series. It is Part II. of Preyer's great work on "The Mind of the Child," treating of *The Development of the Intellect* (price, $1.50), as Part I. did of "The Senses of the Will." The two parts (volumes vii. and ix. of the series) of course are really one work, and one that has received wide attention among scholars in Europe, and been recognized as by far the best treatise on the subject that has yet appeared. It cannot be too highly praised. Minute, accurate, thorough, it traces and records every daily step in the growth of the human mind, from the day of birth to maturity, with a painstaking conscientiousness that is simply to be wondered at. The result is a work of the utmost value and importance, of profound interest, and of especial practical utility to every intelligent educator.

There are about twenty volumes published so far in Messrs. G. P. Putnam's Sons admirable series of popular historical studies entitled "The Story of the Nations." The latest received is *The Story of Mexico* ($1.50), and is as good as any in the series, which is saying a great deal. It is by Susan Hale, who jointly with her father Dr. E. E. Hale, wrote also the *Story of Spain*. Like the rest of the series, it is fully and well illustrated and supplied with excellent maps. Though written in a popular, entertaining style, these books are really works of intrinsic and permanent historical value, of exceptional interest to the general reader, and of worth to the special student as the most convenient set of reference volumes to be had on the subject. For school libraries it would be hard to find anything more suitable, or more fully supplying all the conditions required, brightness, reliability, and cheapness. Another work issued by the same publishers, which, while of special value to Sunday-school workers and ministers, would also serve a good purpose in our public schools, is the set of handsome volumes on *Scriptures: Hebrew and Christian*, prepared by Drs. E. T. Bartlett and J. P. Peters. The

second of the three volumes is just out, and is on *Hebrew Literature*, as the first was on "Hebrew Story from the Creation to the Exile." It completes the Old Testament part of the work, and gives in the words of Scripture, rearranged and newly translated, the history of the Jews from the Exile to Nehemiah, the Hebrew Law, Hebrew Tales, Prophecy, Poetry and Wisdom. For making the Bible comprehensible and its contents freshly interesting, we know nothing to equal this work.

A GRAMMAR OF THE LATIN LANGUAGE. *For the Use of Schools and Colleges, by E. A. Andrews and S. Stoddard. Revised by Henry Preble, of Harvard University. Boston: Houghton, Mifflin & Co., 12mo., half leather, pp. 450. Price, $1.12.*

Here is our old familiar and trusty friend "Andrews & Stoddard" with his youth renewed like the eagle's! We wish we could do the same, if only for the pleasure of studying this new revision of our old text-book, with its inviting type, clear and simple arrangement, and the multitude of other improvements Prof. Preble has made. We are quite sure that in this new and more scientific form, with its improved treatment of the Latin sentence, Word Formation, the Conjugations, and especially the Third Declension, we would find the study easier, and would make more thorough and rapid progress than we did when we had only the grammar of our school days. It was the best in its day, and we firmly believe that Prof. Preble has succeeded in making it again the best for the present day. At least we have seen no Latin grammar which we would ourselves prefer, as pupil or as teacher. Teachers can get a copy for examination by sending 60 cents to the publishers before March 1st.

ELEMENTS OF THE INTEGRAL CALCULUS. *With a Key to the Solution of Differential Equations, and a Short Table of Integrals. By Wm. E. Byerly, Ph.D. Boston: Ginn & Co. 8vo., pp. 370.*

ELEMENTS OF PLANE ANALYTIC GEOMETRY. *By John D. Runkle. Boston: Ginn & Co. 8vo., pp. 344.*

Both these volumes are fine specimens of what text-books in the higher mathematics should be. The former has in its first edition been some time before the educators of our country. This second edition contains a few corrections and some valuable new matter, which make it an improvement over the first. Prof. Runkle's Geometry is specially adapted to the needs of students of Technology, and is particularly full and thorough in the more elementary and fundamental parts of the general subject.

A TEXT-BOOK OF GENERAL ASTRONOMY. *For Colleges and Scientific Schools. By Charles A. Young, Ph.D., LL.D. Boston: Ginn & Co. 8vo., pp. 551. Price, $2.50.*

A work just like this has long been wanted, not only in schools but by the general student. And the eminent author is perhaps the one man in this country whose authority as an astronomer and skill as an entertaining writer are so combined as to be able to produce just such a work, giving a clear, accurate, and justly proportioned presentation of astronomical facts, principles, and methods, in such form that they can be easily apprehended by the average college student with a reasonable amount of effort. "Truth, accuracy, and order have been aimed at first, with clearness and freedom from ambiguity." It is needless to say that Prof. Young's spirit and method are thoroughly scientific, free from all mere fanciful speculation such as is indulged in by some "popular astronomers," and yet that his work is fully up to the times, giving us the very latest ascertained facts. The cuts and illustrations are nearly all new, and excellent; while the Tables at the end of the book, and the full index, are exceedingly helpful. The publishers too have done their work in a superior manner. The result is a volume that stands unrivaled in its sphere, and deserves unqualified praise.

A COMPLETE GRADED COURSE IN ENGHISH GRAMMAR AND COMPOSITION. *By Benj. Y. Conklin. New York: D. Appleton & Co. 12mo., pp. 296.*

This appears to us to be a very sensible and practical little working manual, easy and natural in its method, avoiding many of the faults of the ordinary formal grammar, and ever keeping prominently in view the true end and object of such study, namely, the power to use language correctly, and not only the ability to parse and analyze sentences. The author starts with the simplest form of sentences, and then proceeds gradually and naturally to develop this, by the method of induction.

XENOPHON HELLENICA, BOOKS, I–IV. *Edited on the Basis of Büchsenschütz's Edition, by Irving J. Manatt. Boston: Ginn & Co. 8vo., pp. 286. Price, $1.65.*

It is a pity that the Hellenica is not more generally read in our colleges and high schools, as it is every way as worthy and fully as interesting as the Anabasis. We believe this excellent edition of it will do much to popularize it. The text is carefully edited; Notes full and judicious; and the Appendix with Critical Notes, Bibliography, and Index of Proper Names, a valuable adjunct. The volume is a worthy addition to the publishers' admirable "College Series of Greek Authors."

BUSINESS. *By James Platt, F. S. S. Authorized American Edition. New York: G. P. Putnam's Sons. 16mo., pp. 289.*

Though in no sense a "school book," we call attention to this famous little volume here because we believe it ought especially be read by the older boys of our schools. In forcible language, yet graceful, sprightly, and entertaining, the author shows what qualities are essential to the true "business man," and what are the principles on which every legitimate business must be founded and can be made successful. It is an eminently wholesome and invigorating little book, well worth reading and pondering over. Its popularity in England has been immense, having gone through 75 editions since first published, some twenty-five years ago.

THE TEACHERS' PSYCHOLOGY. *A Treatise on the Intellectual Faculties, the Order of their Growth, and the Corresponding Series of Studies by which they are Educated. By A. S. Welch, LL.D. New York: E. L. Kellagg & Co. 12mo., pp. 286. Price, $1.25.*

The imperative need of the study of psychology by teachers is being more and more fully recognized. Of this Prof. Welch's work is but another evidence. It is an attempt to give just so much of the science as teachers will need, a question on which, of course, there will always be considerable difference of opinion. Nevertheless as a compendium and an introduction to a more full and thorough study of the laws governing the human intellect, this book may serve a good purpose. If it shall incite teachers to take up such works as Preyer's, and Porter's, and carefully to study them, we heartily recommend this "Teachers' Psychology."

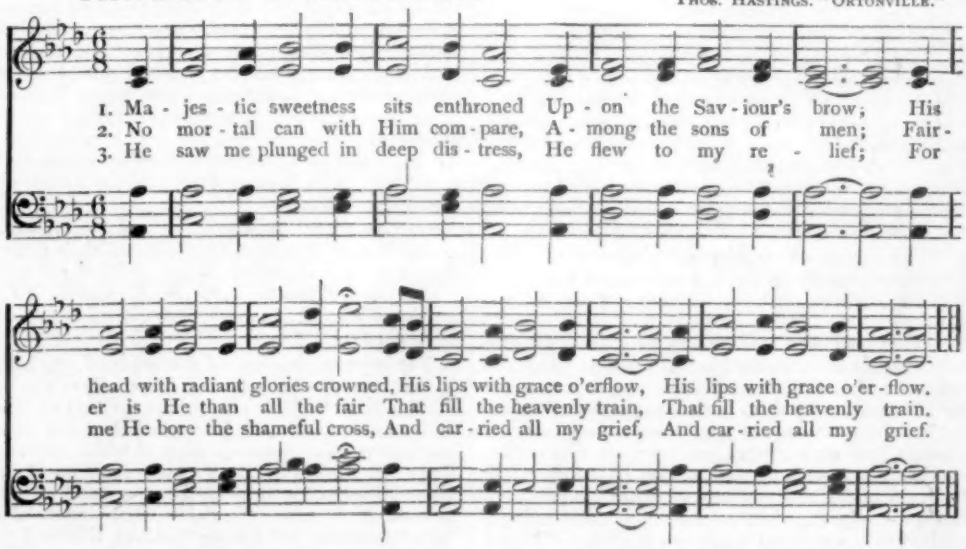
OH, HAPPY DAY!

PHILIP DODDRIDGE, 1755.

1. Oh, happy day, that stays my choice On thee, my Saviour and my God! Well may this glowing heart re-
2. Oh, happy bond, that seals my vows To him who mer-its all my love! Let cheerful anthems fill his
3. 'Tis done, the great transaction's done; I am my Lord's, and he is mine; He drew me, and I followed
4. Now rest, my long-di-vided heart! Fixed on this blissful centre, rest; Here have I found a nobler
Chorus.
joice, And tell its rap-tures all a-broad. Hap-py day, hap-py day, When Je-sus
house, While to that sa-cred shrine I move. Hap-py day, hap-py day, When Je-sus
on, Charmed to confess the voice di-vine. Hap-py day, hap-py day, When Je-sus
part, Here heavenly pleasures fill my breast. Hap-py day, hap-py day, When Je-sus
Fine.
D.S.
washed my sins a-way! He taught me how to watch and pray, And live re-joic-ing ev-'ry day.

MAJESTIC SWEETNESS.

SAMUEL STENNETT.
THOS. HASTINGS. "ORTONVILLE."


1. Ma-jes-tic sweetness sits enthroned Up-on the Sav-iour's brow; His
2. No mor-tal can with Him com-pare, A-mong the sons of men; Fair-
3. He saw me plunged in deep dis-tress, He flew to my re-lief; For
head with radiant glories crowned, His lips with grace o'erflow, His lips with grace o'er-flow.
er is He than all the fair That fill the heavenly train, That fill the heavenly train.
me He bore the shameful cross, And car-ried all my grief, And car-ried all my grief.

4. To Him I owe my life and breath,
And all the joys I have;
He makes me triumph over death,
He saves me from the grave.

5. Since from His bounty I receive
Such proofs of love divine,
Had I a thousand hearts to give,
Lord, they should all be Thine.